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ABSTRACT

This book contains three monographs based on research conducted in a number of African countries between 1965 and 1967 in an attempt to illuminate some of the problems confronting educational planners in developing countries. This book is one of three related volumes of case studies on educational planning in the English-speaking countries of Uganda, Tanzania, and Nigeria. Each volume consists of several previously published monographs, which have been collected in book form to facilitate comparison of the approaches taken in different countries to common problems. This volume contains studies from Nigeria and Tanzania on the costing and financing of educational development. Included are the following monographs: "The Costing and Financing of Educational Development in Tanzania," by J. B. Knight; "Financing of Education in Nigeria," by A. Callaway and A. Musone; and "The Integration of External Assistance with Educational Planning in Nigeria," by L. Cerych. (Author/JG)

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IIEP African studies

The research undertaken by the International Institute for Educational Planning (IIEP) in African countries between 1965 and 1967 was an attempt to shed light upon several important problems confronting educational planners in virtually all developing countries. These problems included the integration of educational and economic planning, the costing and financing of educational development, the supply of and demand for teachers, the effect of rapid expansion on the quality of education, the planning of adult education, the bearing of educational planning upon external aid, and the administrative aspects of planning, including implementation.

The project was undertaken in three stages. The first involved the collection and analysis of documentation on three English-speaking countries, Nigeria, Tanzania and Uganda, and two French-speaking countries, Ivory Coast and Senegal, where the studies were to be undertaken, followed by the drafting and critical review of provisional reports. The second stage consisted of field investigations by staff members and expert consultants, lasting one to three months in each case, and carried out with the co-operation of officials and advisers of the countries concerned. The last stage involved the drafting, criticism, revision and final editing of the report.

Two senior staff members of IIEP, Raymond Lyons and Raymond Poignant, directed the studies in the English-speaking and French-speaking countries respectively, from initial design to final editing. In all, sixteen individual case studies (eleven concerned with English-speaking countries and five with French) were prepared for publication and issued promptly in monograph form.

The great advantage of issuing the individual case studies separately was that of speed. By this method, the shortest possible time elapsed between completion of the case studies and getting the results into the hands of the users. Now that all the research work has been completed and the individual monographs published, however, the Institute has decided to bring together related

studies and issue them in book form. Three volumes of case studies on English-speaking African countries are now being published, dealing in turn with the process of educational planning, the costing and financing of educational development, and the integration and administration of educational development.

The present volume contains studies from Nigeria and Tanzania on the costing and financing of educational development. The Institute hopes that the reader, by being able to compare approaches made in different countries to common problems, may be able to extract from their experience lessons which may prove useful not only to the countries studied but to *all* developing countries.

While gratitude is expressed to the governments, organizations and many individuals whose co-operation made these studies possible, and to the Ford Foundation and the French Government for their help in financing them, it is emphasized that responsibility for the facts, analyses and interpretations presented rests with the authors. In making the decision to publish these studies, neither Unesco nor IIEP necessarily endorses the views expressed in them, but they feel that their content is worthy of open and free discussion.

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The costing and financing of educational development in Tanzania

J. B. Knight

Foreword

A central purpose of educational planning is to help a nation decide more rationally how much of its total resources to devote to education—as against other important development needs, such as industry, agriculture, housing and transportation—and how best to employ these limited resources to achieve maximum educational results, both quantitatively and qualitatively. To accomplish this purpose requires a detailed knowledge of educational costs and financing, both over-all and for each type and level. It also requires reliable methodologies for projecting these economic dimensions of education into the future. Only if educational planners provide a clear picture of the alternative costs and benefits of different educational options can policy-makers decide rationally how much to spend on education, how best to spend it, and how to acquire the needed resources. This last matter requires an examination of private as well as public sources of educational finance, and of public finance at each level of government.

This monograph by John Knight—a consultant to IIEP and a staff member of the Institute of Economics and Statistics, University of Oxford—provides valuable insights into all these important economic aspects of educational planning, by showing how they were dealt with in the case of one developing country. Tanzania provided an excellent laboratory for this purpose, since it is a relatively poor nation that is 'pulling itself up by the boot-straps' by the determined use of economic and educational planning, including the courageous application of hard priorities to the allocation of its limited resources.

Anyone who examines this case will agree, I believe, that a ministry of education will be most successful in serving the youth of its nation and in promoting national economic and social development if it comes to the crucial dialogue with the nation's economic authorities well armed with a sound analysis of educational costs and finance. No grounds are more favourable for winning adequate resources for education from hard-headed financial decision-makers, especially if the analysis shows that every reasonable effort is being made to employ educational resources with maximum efficiency and effectiveness.

The author therefore makes a plea for the detailed measurement of educational expenditures for each component of the system, despite the inevitable difficulties involved in gathering good cost data in most developing countries.

Discovering present costs and recent trends is difficult enough, but making realistic projections of future educational costs and financial requirements is even harder. Here the author's contribution is especially useful, for he sorts out the various factors that must be taken into account—including qualitative factors—in projecting educational costs. Unit costs throughout the educational systems, he emphasizes, are likely to change, partly for reasons beyond the control of educational authorities (such as rising prices or general salary increases), but also for reasons internal to the educational system over which at least some measure of control can be exerted (such as structural reforms, size and geographic distribution of new school buildings, utilization of facilities, teacher classifications and promotion policies, class size and curriculum changes). Thus cost analysis inevitably points up crucial issues of quality as well as quantity, and of educational efficiency as well as effectiveness.

The Institute is indebted to the educational and economic authorities of Tanzania for their considerable help to John Knight at each stage of this study. Special thanks are due to Simon Pratt, a planning expert furnished at the time by Unesco to the Ministry of Education, who collaborated in assembling much useful data, as well as to Raymond Lyons, a senior staff member of the institute, who co-operated closely with the author from the beginning to the end of the study.

PHILIP H. COOMBS
Director, IIEP

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Introduction

In Tanzania, as in many developing countries, there are two major constraints on economic development: a shortage of qualified manpower and a lack of finance. Education is necessary to overcome the shortage of qualified manpower, but the provision of education will, in turn, intensify the financial problem. Educational planners are thus faced with the crucial question of whether the country can afford the educational programme required to meet manpower needs or, inversely, whether manpower needs can be met from the limited resources available for education.

All resources devoted to education represent a cost to the economy, because they could be used to achieve other objectives. It is important, therefore, to measure the economic cost of an educational programme, comprising all the expenditure devoted to education, both formal and non-formal, whether by central or local government, private institutions or parents. What we are interested in is the proportion of national resources devoted to education. This is best measured by expressing educational expenditure as a proportion of the gross domestic product (GDP).

In the production of a long-term plan, it is necessary to project recurrent and capital expenditure on education over the plan period. Recurrent and capital expenditure on education is estimated by applying the average recurrent cost per pupil and the average capital cost per place to the projected enrolments and the corresponding increase in the number of places. However, as average costs are unlikely to remain constant, they should be broken down into their various components, and future costs estimated in the light of the changes likely to occur in the cost of each component. The future recurrent cost per pupil will be affected by such factors as changes in teachers' salary scales, movements up the salary scale, the relative proportions of teachers with different qualifications, the average size of the class, the relative proportions of pupils at boarding and day schools and the cost of books and equipment. The future capital cost per place will depend on

building costs, on the average size of a class, on the degree of standardization of new buildings, on economies of scale, etc. It is also necessary that the average cost per pupil and the average cost per place be calculated separately for each level and type of education.

In the allocation of expenditure, a distinction must be made between primary and post-primary education. The quantitative expansion of post-primary education is determined largely by the manpower plan. If this expansion is deemed to be too expensive, the only significant means of reducing expenditure is by cutting the average cost per pupil and/or per place. In the case of primary education, which is not universal and for which no clear manpower targets can be set, financial considerations can enter far more into the determination of expenditure. Here both enrolments and costs per pupil or per place can be manipulated.

One of the fundamental tasks of the educational planner is to seek out economies in the use of resources. By 'economy' we mean a reduction of input in relation to output, i.e., a lowering of unit cost per pupil rather than of total cost, and a lowering of cost per pupil receiving education of a certain quality rather than unit cost irrespective of quality. In other words, an economy is achieved if the unit cost is reduced without a fall, or at least with less than a 'proportionate' fall, in educational standards. Indeed, an increase in standards which does not entail a rise in unit cost, or which entails a less than 'proportionate' rise, may also be regarded as an economy. The breakdown of unit costs into their components facilitates the search for economies, whether these are achieved by cutting unnecessary costs, such as of lavish buildings, or by supplying items inadequately provided, such as books, which improve the effectiveness of education.

The costing of an educational plan requires the knowledge of facts in the form of detailed statistics. Such statistics are usually not collected until they are needed for a specific purpose, such as an educational plan. In the 1950s, statistics were collected for administrative purposes and were unsuitable for planning purposes. The system of accounting did not lend itself to the calculation of unit costs by level or type of education, since expenditure on education was broken down by racial group instead of by level. There was a considerable expansion of educational expenditure in the late 1950s, but this was the result of decisions taken from year to year and without reference to any long-term costed plan.

The first steps towards educational planning proper were taken as a result of the visit made by the Unesco Educational Planning Mission. In its report,¹ the mission pointed out the need for a costed educational plan, and made some illustrative cost calculations on the basis of the inadequate data then available. As a result, a planning section was established in the Ministry of Education in 1962, and an increasing amount of relevant and reliable financial data has been collected and

1. *Report of the Unesco Educational Planning Mission to Tanganyika...* (see our bibliography).

used for planning purposes since that date. Much of the effort of the planning section has been devoted to the preparation of a five-year plan for education, which is an integrated part of the five-year economic plan covering the period from mid-1964 to mid-1969.¹

It would be as well to bear in mind the inevitable deficiencies of the available statistics and the consequent danger of drawing misleading conclusions from them. The first comprehensive financial table for public education was produced for the year 1962, but the data involved a good deal of guess-work and were considered inadequate. In fact, 1963 is the first and, at the time of writing, the only year for which comprehensive and reliable data are available. Consequently, most of the tables in this study refer to 1963. Even the data for 1963 are incomplete, since they exclude expenditure on fringe benefits of teachers: medical benefits, housing subsidies, gratuities to contract staff and the non-contributory pension scheme for which all teachers have become eligible since the introduction of the Unified Teaching Service in 1963. Comparisons of one year with another are liable to be misleading, especially in view of statistical changes which are purely the result of changes in administrative arrangements. In obtaining similar data for different purposes, it is sometimes necessary to use different sources. This can give rise to apparent inconsistencies, which are due in reality to the approximate nature of many of the data. It will be noted that capital expenditure does not receive as much emphasis in the study as does recurrent expenditure; the reason being a lack of data on capital expenditure, particularly expenditure financed from non-government sources.

Should foreign aid enter into the calculation of economic costs? Clearly, if foreign aid is available exclusively for educational purposes, its use for education cannot be said to represent an economic cost to Tanzania. But if foreign aid is available for any purpose of the recipient's choosing and is devoted to education, then it does represent an economic cost to Tanzania, since it could have been used to achieve other economic objectives. Secondly, the expenditure financed from foreign sources at present may be financed from local sources in the future. For these reasons aid costs are calculated in the study, wherever possible, but local costs are separated from aid costs.

The study is confined to the formal educational system and to public education. It is concerned neither with non-formal education, such as adult education or civil service training, nor with private schools, i.e., those which receive no government aid or recognition. No statistics are collected on private schooling, which is thought to be financially insignificant. The methods and techniques discussed are those employed in Tanzania, but no claim is made that these are necessarily the best for other countries or, indeed, for Tanzania itself. Where other methods might usefully be employed, these are drawn to the reader's attention.

1. Thomas report (see our bibliography).

The subject-matter is approached, first, by showing education in relation to the economy, then, by dealing separately with each level and type of education, and lastly, by bringing together and comparing the different levels and types. The average cost of each level and type of education has been calculated and the method of calculation explained. The average cost estimates on which the plan projections were based relate to the outdated and inadequate statistics for 1962, and much of the author's time in Tanzania was devoted to the revision of these cost estimates.

Many policy issues in this study have to be resolved by balancing economic costs against educational considerations. The latter cannot always be reduced to quantitative terms, but in most cases their economic implications can be quantified. One of the important tasks of the educational planner is to facilitate decision-making by quantifying the economic implications of different policies. In Tanzania, the Treasury and the Directorate of Development and Planning are primarily concerned with economic matters, whereas the Ministry of Education is guided more by educational considerations. This problem of balancing educational arguments against economic necessities which runs like a *leit-motiv* throughout this study is a salient feature of the discussions between the Ministry of Education and the economic ministries, and indeed, of educational planning in any country.

1 Education and the economy

In 1964 Tanzania's gross domestic product (GDP) amounted to £244 million for a population of 10.0 million, indicating an income per head of £24.4 per annum.¹ In a country with so low an income per head, educational policy must be formulated with reference to its effects on the economy. What is the capacity of the economy to provide resources for education? Let us first consider the sources of government revenue.²

The sources of government revenue

The Tanzanian economy is export-dominated: between 1954 and 1964, exports represented between 40 and 50 per cent of monetary GDP, and the growth in exports has been the prime mover of the whole economy. Though export duties do not in themselves yield a significant part of government revenue, the latter depends to a large extent on the level of economic activity, which in its turn is heavily dependent on the export sector. Thus the outlook for government recurrent revenue is closely linked to the prospects for Tanzania's major export products—sisal, coffee, cotton, diamonds and pyrethrum—in world markets. Future resources for education may be affected as much by the development of a synthetic substitute for sisal as by any other factor.

The main sources of government recurrent revenue are shown in Table 1.

Over the eight years (1955/56 to 1963/64), direct taxation rose by 13 per cent, indirect taxation more than doubled, and excise duties exhibited the greatest elasticity, rising by 144 per cent. Total government recurrent revenue increased by more than 50 per cent, whilst monetary GDP (i.e., GDP excluding the production

1. The Tanzanian pound is equivalent to one pound sterling. There are 20 shillings in the pound; however, for planning purposes, it is convenient to use decimals of a pound.

2. Central and local governments will be referred to as 'Government' and 'local authorities'.

The costing and financing of educational development in Tanzania

TABLE 1. Sources of government recurrent revenue (in £ million)

Sources	1955/56	1963/64	1964/65 ¹	1965/66 ¹	Percentage increase 1955/56-1963/64
Direct taxation					
Income tax	4.5	6.1	7.1	7.2	35
Personal tax	1.5	1.0	1.1	1.8	33
Other	0.3	—	—	—	—
Total	6.3	7.1	8.2	9.0	13
Indirect taxation					
Import taxes	5.5	10.4	11.7	13.6	89
Excise duties	1.6	3.9	4.4	5.1	144
Other ²	1.0	2.3	5.2	3.4	130
Total	8.1	16.6	21.3	22.1	105
Government property	1.8	2.6	2.3	2.0	44
Other sources	2.4	2.0	2.2	2.6	-17
Total recurrent revenue	18.6	28.3	34.0	35.7	52
Monetary GDP ³	89.3	148.4			66

NOTES

1. Estimates only

2. Including export duties

3. Monetary GDP is converted from a calendar year to a financial year basis by simple averaging

SOURCES

Central Statistical Bureau
Statistical abstracts (annual)
Budget surveys (annual)

of the subsistence sector) rose by 66 per cent, indicating an income-elasticity of taxation of approximately 0.8. However, the plan assumes an annual rate of growth of 8.5 per cent for the monetary GDP and 5 per cent for the government revenue, which implies an income-elasticity for government revenue of about 0.6, rather lower than that experienced in the past. It is the intention of the planners to recommend an adjustment of tax rates and, if necessary, new taxes in order to achieve the annual target of a 5 per cent increase in revenue.¹

The sources of government capital revenue are shown in Table 2. While the relative proportions of external and internal revenue vary considerably from one year to another, loans from external sources exhibit a definite trend, rising from a nominal figure in 1961/62 to an estimated figure of almost 38 per cent of total finance in 1965/66. Over the plan period, loans are expected to provide almost 72 per cent of government capital revenue. This raises a problem of debt-servicing and repayment. A rough calculation shows that, though the average rate may have been somewhat lower over a number of recent years, the average rate of interest on

1. There is some evidence that an annual 5 per cent increase during the plan period is being exceeded: in 1966/67 estimated revenue shows, so far, an increase of as much as 10 per cent over the 1965/66 figures.

TABLE 2. Sources of government capital revenue

(a) In £ million	1961/62	1962/63	1963/64	1964/65 ¹	1965/66 ¹	Plan period
External						
Grants	3.18	4.93	1.26	1.03	2.06	8.0
Loans	0.02	0.23	1.31	4.37	11.71	100.2
Total	3.20	5.16	2.57	5.40	13.77	108.2
Internal						
Government saving	0.0	0.35	0.71	2.0	0.0	9.6
Government borrowing	4.14	0.16	3.98	14.69	17.41	21.9
Total	4.14	0.51	4.69	16.69	17.41	31.5
Total capital revenue	7.34	5.67	7.26	22.09	31.18	139.7
(b) In percentages						
External						
Grants	43.3	86.9	17.4	4.7	6.6	5.7
Loans	0.3	4.1	18.0	19.8 ²	37.6	71.7
Total	43.6	91.0	35.4	24.5	44.2	77.4
Internal						
Government saving	0.0	6.2	9.8	9.1	0.0	6.9
Government borrowing	56.4	2.8	54.8	66.4	55.8	15.7
Total	56.4	9.0	64.6	75.5	55.8	22.6
Total capital revenue	100.0	100.0	100.0	100.0	100.0	100.0

NOTE

1. Estimates only, including unspent balances from previous years

SOURCES

Adapted from *Budget surveys* (annual) and *Five-year plan*, vol. 1, p. 97

foreign loans granted in 1963/64 was about 4.4 per cent per annum.¹ Therefore it is necessary to scrutinize closely all capital expenditures, including those devoted to education.

The sources of educational revenue

The sources of recurrent revenue for education are shown in Table 3. In 1963, the Government provided almost two-thirds of the recurrent revenue and the local authorities some 18 per cent. Over the plan period, their shares will rise to 71 and 20 per cent respectively, while that of parents in the form of fees and that of the voluntary agencies will fall correspondingly. The role of the voluntary agencies has changed considerably over the years, and now that they no longer account to

1. *Appropriation Accounts 1963/64*, pp. 11-13.

TABLE 3. Sources of recurrent revenue for education

	1963		Plan period	
	£ thousand	Percentage	£ thousand	Percentage
Government	4 451	63.8	35 506	71.0
Fees	898	12.9	3 500	7.0
Local authorities	1 263	18.1	9 956	19.9
Voluntary agencies	273	3.9	1 062	2.1
Other	92	1.3	—	—
Total	6 977	100.0	50 024	100.0

NOTES

Aid is excluded from the table because the figure for recurrent aid over the plan period is not available

The contribution of the East African Common Services Organization towards higher education is excluded

SOURCES

Ministry of Education. *Annual report, 1963* and internal files

A.C. Mwingira; Simon Pratt. *The process of educational planning in Tanzania* (in Vol. I of this series). Paris, Unesco/IIEP, 1969.

any significant extent for recurrent revenue, their main recurrent contribution consists in providing administrative services and in attracting teachers. Aid for recurrent expenditure takes the form mainly of 'overseas addition' to the salaries of expatriate staff, but such funds are not regarded as a scarce resource, and are, therefore, not included in the tables of revenue and expenditure of the *Annual Reports* and the plan. In fact, aid in the form of overseas addition amounted to 3 per cent of the total recurrent expenditure on education in 1963.

The sources of funds for capital expenditure on education are shown in Table 4. Both the government and voluntary agency contributions include foreign aid, but the amount of this aid could not be ascertained. In future, however, each item of government capital expenditure will be broken down by origin of funds, and the sources of external funds will be indicated. Thus, according to the 1965/66 estimates, government capital expenditure on education, estimated at £3 million, will be covered as follows: 20 per cent from internal sources, 71 per cent from external sources, and only 9 per cent remaining to be secured. But for government

TABLE 4. Source of capital revenue for education

	1967		Plan period	
	£ thousand	Percentage	£ thousand	Percentage
Government	1 081	72.7	14 000	78.7
Local authorities	245	16.5	3 400	19.1
Voluntary agencies	160	10.8	400	2.2
Total	1 486	100.0	17 800	100.0

NOTE

Comprehensive annual data are available for 1962 only and are inaccurate

SOURCES

Ministry of Education. *Annual report, 1962* and *Five-year plan*, vol. I, pp. 91-92

capital expenditure as a whole, the corresponding proportions are 25, 43 and 32 per cent; indicating that the Ministry of Education is better placed than most other ministries in obtaining capital funds, and in attracting them from external sources.

There is a logical problem involved in isolating aid to education. Any foreign aid may be regarded as aid to education if it releases resources to education for expenditures which would otherwise not be carried out. In other words, foreign aid should be seen as contributing to a general pool from which resources are allocated according to the Government's choosing. That is why the Government pays little attention to the notion that high interest loans should be allocated to high-yielding investments and vice versa; it is concerned only with the proportions of grants, and 'hard', 'medium' and 'soft' loans in its total external revenue.

The allocation of government expenditure

Although future government expenditure on education depends largely on future government revenue, the relationship is only a loose one, because it is possible for the Government to reallocate expenditure among its different services.

Table 5 shows government expenditure in the administrative sense, i.e., the vote of the Ministry of Education and that of all ministries combined. The proportion of government recurrent expenditure devoted to education rose from 14.4 per cent in 1955/56 to 18.2 per cent in 1963/64. However, these figures understate the true

TABLE 5. Government recurrent and capital expenditure¹ (total and on education)

Financial year	Recurrent			Capital		
	Education	Total	Percentage	Education	Total	Percentage
	(£ million)	(£ million)		(£ million)	(£ million)	
1955/56	2.67	18.49	14.4	0.67	4.08	16.4
1961/62	3.91	24.71	15.8	1.10	7.34	15.0
1962/63	4.41	25.59	17.2	1.06	5.45	18.7
1963/64	4.94	27.12	18.2	1.06	7.25	14.6
1964/65 ^a	5.93	32.51	18.2	2.50	22.09	11.8
1965/66 ^a	6.50	36.43	17.8	3.02	31.18	9.7
<i>Five-Year Plan:</i>						
1964/65	5.93	32.94	18.0	2.00	14.90	13.4
1965/66	6.52	34.83	18.7	2.30	16.89	13.6
1966/67	7.05	37.01	19.0	2.70	19.77	13.7
1967/68	7.68	39.20	19.6	3.42	23.95	14.3
1968/69	8.32	41.58	20.0	3.58	26.49	13.5
Total	35.50	185.56	19.1	14.00	102.00	13.7

NOTES

1. Net of appropriations-in-aid

2. Estimates

SOURCES

Budget surveys (annual), and Five-year plan, vol. I, pp. 93-94

TABLE 6. Functional analysis of combined recurrent and capital expenditure, total and on education by Government and local authorities

Calendar year	Government			Local authorities			Government and local authorities		
	Education	Total	%	Education	Total	%	Education	Total	%
	(£ million)			(£ million)			(£ million)		
1957	4.19	23.05	18.2	0.70	4.15	16.9	4.89	27.20	18.0
1961	5.50	32.49	16.9	0.99	5.37	18.4	6.49	37.86	17.1
1962	5.97	37.92	15.7						
1963	5.97	39.65	15.1						
1964	7.42	51.61	14.4						
1965	9.22	68.66	13.4						

NOTES

The data for 1964 and 1965 are estimates only.

The local authority accounts are on a calendar year basis, and are available only up to 1961.

The central Government data are converted to a calendar year basis by simple averaging.

SOURCES

1957-61, *Statistical abstracts*1962-65, *Budget surveys*

rise owing to a purely administrative change which altered accounting procedures during the 1950s: when the Government was responsible for administering primary education, the contribution made by local authorities was included in the definition of government expenditure. The proportions for 1964/65 and 1965/66, being estimates and not actual expenditures, are probably too low, since the Ministry of Education usually manages to spend a higher proportion of its vote than do other ministries. Whereas government recurrent expenditure on education is planned to rise as a proportion of its total recurrent expenditure during the plan period, the proportion of capital expenditure on education will remain practically constant.

In addition to the government accounts in Table 5, there is also a 'functional' analysis of government recurrent plus capital expenditure,¹ including appropriations-in-aid, shown in Table 6. As can be seen, government expenditure on education fell from 18.2 per cent in 1957 to 15.1 per cent in 1963. However, it is difficult to say whether, or to what extent, this fall resulted simply from the change in accounting procedures mentioned above, an increasing contribution from non-government sources, or a diversion of national resources away from education. Corresponding data for local authorities are available only up to 1961.

The allocation of national resources to education

It is not easy to ascertain the proportion of GDP devoted to education with any degree of accuracy. Before 1962, the statistics of recurrent expenditure did not

1. Produced by the Central Statistical Bureau in accordance with the United Nations *Manual for Economic and Functional Classification of Government Transactions*, New York, 1958.

include the contribution of voluntary agencies, which was, in fact, unknown. The 1962 figures were estimates which exceeded actual expenditure, so that the data for 1962 and 1963 are not strictly comparable. Data on capital expenditure are even more unsatisfactory: building by voluntary agencies was partly excluded before 1962, estimated very roughly for 1962, and again excluded for 1963. The reason for these deficiencies is that the planners in the Ministry of Education are interested in capital costs over a planning period rather than in any one year. Table 7 showing the expenditure on education as related to the gross domestic product should, therefore, be viewed with some reservation.

It is a major defect of the plan that it specifies only recurrent expenditure on education financed by the Government—equal to 2.5 per cent of GDP over the plan period—and not total recurrent expenditure on education. The latter appeared in fact in the first working papers for the plan, amounting to £58.2 million, or 4.1 per cent of GDP, but this estimate was subsequently curtailed by the Directorate of Development and Planning, and the revised figure puts total recurrent expendi-

TABLE 7. Educational expenditure and gross domestic product

	1956	1962	1963	1964	Plan
(a) In £ million					
GDP	152.4	208.6	232.3	244.3	1434.0
Monetary GDP	89.3	120.8	141.6	155.1	
Monetary GCF (gross fixed capital formation)	23.3	24.5	24.5	30.6	242.0
Recurrent educational expenditure	3.46	6.75	7.11		50.9
Capital educational expenditure	1.24	1.49	1.02		16.9
Total educational expenditure	4.71	8.24	8.13		67.8
(b) Percentages					
As a percentage of GDP:					
Recurrent educational expenditure	2.3	3.2	3.1		3.5
Total educational expenditure	3.1	4.0	3.5		4.7
As a percentage of monetary GDP:					
Recurrent educational expenditure	3.9	5.6	5.0		
Total educational expenditure	5.3	6.8	5.7		
Monetary GCF as a percentage of monetary GDP	26.1	20.3	17.3	19.7	
Capital educational expenditure as a percentage of monetary GCF	5.4	6.1	4.2		7.0

NOTES

The data for 1964 are estimates only

The data of government expenditure have been converted from a financial year basis to a calendar year basis by simple averaging

The data of monetary GCF (gross fixed capital formation) after 1961 are derived from tables in the *Budget surveys* headed 'total GCF'. However, these figures correspond with data for monetary GCF given in the *Statistical abstracts* (there being an overlapping year, 1961)

The plan figure for GDP is derived by rough interpolation. That for

capital expenditure on education is shown as £16.9 million on page 57 and £18.1 million on page 91 (vr. 1).

SOURCES

Statistical abstracts (annual)

Budget surveys (annual)

Ministry of Education *Annual report*

Government financial statements

ture for education during the plan period at £50.9 million, or 3.5 per cent of GDP.¹ The rise from 3.1 per cent in 1963 will be achieved largely through an increased government contribution (see Table 3); the proportion of government recurrent expenditure on education being raised from 17.2 per cent in 1962/63 to 19.1 per cent for the plan period (see Table 5).

The figures given in Table 7 for total educational expenditure probably over-estimate real expenditure in 1962 and certainly under-estimate it for 1963, since they exclude private contributions to capital expenditure. For the plan period, total educational expenditure was originally estimated at 5.8 per cent of GDP and subsequently revised to an unpublished figure of 4.7 per cent. The rise from 3.5 per cent in 1963 to 4.7 per cent for the plan period is due mainly to an expected increase in foreign aid for capital expenditure and in the government contribution to recurrent expenditure; also, the 1963 figure is under-estimated.

The projections of GDP were made on the basis of an assumed annual growth rate of 6 per cent for the whole economy and of 8.5 per cent for the monetary economy. However, the educational targets may be achieved even if actual growth falls short of the planned rate, provided that government revenue can be increased by 5 per cent per annum as planned; in which case, education will absorb a higher proportion of GDP.

The proportion of GDP devoted to education did not play any specific part in the projection of educational expenditure over the plan period. It could, however, be employed as a criterion, in the following way. The planners could arbitrarily fix a maximum proportion of GDP to be devoted to education, 4 or 5 per cent, for instance, and then adjust enrolment and average cost in the case of primary education, or average cost only in the case of post-primary education—for which enrolment is determined largely by manpower needs—until total expenditure on education, expressed as a proportion of GDP falls within the maximum. A disadvantage of this procedure lies in the fact that GDP estimates in African countries are extremely arbitrary and approximate in character. However, even if not directly employed in the projection of expenditure, educational expenditure expressed as a proportion of GDP is a very useful cross-check on the cost of an educational programme. The resources devoted to education cannot rise indefinitely in terms of GDP without harm to the economy, and in some countries the limit may have been reached. The criterion of educational expenditure as a proportion of total output might, therefore, be expected to assume a greater importance in educational planning than it has had in the past.

1. A.C. Mwingira; Simon Pratt. *The Process of Educational Planning in Tanzania*, in Vol. I of this series, Paris, Unesco/IEP, 1969.

2 Primary education

Primary education in Tanzania takes place in government, local authority and voluntary agency (mission) schools. All schools which conform to certain conditions laid down by the Ministry are eligible for public financial support, and those which receive it are known as public schools. There is a small number of non-aided private schools, generally of a poor standard, whose enrolment is unlikely to exceed 10 per cent of total primary enrolment. Little is known about these schools; they owe their existence largely to the fact that demand for education exceeds public supply; so that they can be expected to expand if the demand grows more rapidly than public provision. Private schools make no direct claim on public resources, but divert private, and potentially taxable, funds into primary education which is often of low quality.

In 1964, there were 637,000 pupils or 32 per cent of the 7 to 14 age group, in public primary schools. Of these, some 519,000, or roughly 49 per cent of the 7 to 10 age group, were in the lower primary schools (standards I to IV) and the remainder, representing about 14 per cent of the 11 to 14 age group, were in upper primary schools (standards V to VIII).¹ In 1962, there were only 519,000 pupils, of which 453,000 were in lower and 66,000 in upper primary schools. Clearly, the rise in enrolments was proportionately much greater at the upper than at the lower primary level (39 as opposed to 7 per cent per year). Roughly one-third of the pupils are in local authority schools and two-thirds in voluntary agency schools.

Since 1962 the local authorities have been responsible for the administration of primary education. They receive lump-sum subventions from the Government and pay out grants to voluntary agency public schools within their areas. Since 1962 the Government has transferred direct control over primary education to the local educational authorities. However, it attempts to exercise an indirect control by means of its subvention and grant system.

1. Primary grades are referred to as 'standards' in Tanzania.

Recurrent revenue and expenditure

Of total recurrent expenditure amounting to £4.4 million in 1963, the Government accounted directly for only 9 per cent, as against 30 per cent by local authorities and 61 per cent by voluntary agencies. On the other hand, the Government provided 51 per cent of the funds, the local authorities 29 per cent, the voluntary agencies 4 per cent, and 16 per cent came from fees. The transfer of the funds was as follows: the Government gave £1,805,000 in the form of subventions to local authorities and £140,000 to voluntary agencies, presumably in respect of practising schools attached to teacher-training colleges; the local authorities in turn handed over to the voluntary agencies £1,943,000, i.e., more than they had received from the Government.

Prior to 1962, the local authorities paid the Government a contribution towards its expenditure on primary education in their areas. The size of this contribution was very much a matter of historical accident and varied with the degree of enthusiasm of provincial commissioners; it was unrelated to the prosperity of the area. Thus when the subvention system was introduced in 1962, it was found in a sample survey that the contribution of rural authorities varied between 20 and 60 per cent of their direct and indirect expenditure on primary education.¹ The important question of what financial contribution the local authorities as a group should make to primary education, and what variation should be permitted within the group, had not consciously been faced.

In 1962, the subvention paid to each local authority was equal to the Government's net recurrent expenditure in that local authority area in 1961. During 1963 the subvention was maintained at the same level, so that the expansion of primary education was at the expense of local authorities. Increased enrolments were achieved, it seems, at the expense of quality; more teachers of the lowest qualification (grade C) were used on a half-day basis in the upper primary classes, where expansion was most rapid. As long as the subvention was frozen at the 1961 figure, the Government had little power to influence qualitatively or quantitatively the expansion of primary education by local authorities.

The increases in the subvention in 1964 and 1965 were not intended primarily for a further quantitative expansion, but rather for an improvement in quality. The plan makes provision for such increases to meet certain priorities: the Government is to provide one-half or one-third of the additional costs incurred by local authorities in employing additional teachers necessary for full-day attendance in standards III and IV, in the replacement of grade C by grade A teachers in order to improve teaching standards, and in whatever new development the Government approves.

1. *Report of the Unesco Educational Planning Mission to Tanganyika...*, op. cit.

The Government's policy is to raise the share of local authorities to 50 per cent of the 'approved' primary school costs in their areas, expenditure on schools or classes opened without the Government's approval being excluded from the calculation of the subvention. The 'approved' items are the salaries and allowances pertaining to the teaching posts allocated to each authority, recurrent expenditure on equipment, material, maintenance of school buildings, but not boarding costs (covered by boarding fees), maintenance of teachers' housing (covered by rents) and such items as school uniforms, remitted fees and sporting activities. The approved expenditure other than on salaries is calculated on a per pupil basis; increases in teachers' salary scales are met largely or fully by the Government.

Table 8 shows the growing contribution of local authorities towards the approved recurrent expenditure on primary education. The data contained in the table are not readily available and it is hoped that they will be calculated in future on an annual basis.

Table 9 illustrates the progress made in recent years towards equalizing the shares of the local authorities. Twelve local authorities had reached the objective of a 50 per cent contribution in 1964, and over two-thirds were contributing at least 40 per cent. Only one of the thirteen authorities in the 10 to 19.9 per cent bracket was a rural authority, the remaining twelve being town councils receiving government

TABLE 8. Contribution of local authorities towards 'approved' recurrent expenditure on primary education in their areas

	1961	1962	1963	1964
<i>(a) Contribution (in £ thousand)</i>				
Rural local authorities				
Contribution	501	628	868	1 238
Expenditure	1 997	2 183	2 360	2 823
Urban local authorities				
Contribution	—	2	20	57
Expenditure	—	174	400	484
All local authorities				
Contribution	501	630	888	1 295
Expenditure	1 997	2 357	2 760	3 307
<i>(b) Contribution as percentage of expenditure</i>				
Rural	25	29	37	44
Urban	—	1	5	12
Total	25	27	32	39
<i>(c) Percentage increase (over previous year)</i>				
<i>in contribution</i>				
Rural		25	38	43
Total		26	41	46

SOURCE Ministry of Education files

TABLE 9. Contribution level of local authorities towards 'approved' recurrent expenditure on primary education in their areas

Percentage of contribution	Number of local authorities	
	1962	1964
50	1	12
40 - 49.9	5	38
30 - 39.9	20	7
20 - 29.9	19	1
10 - 19.9	9	13
0.1- 9.9	15	0
0		3
Total	69	74

SOURCE: Ministry of Education files

assistance on a different basis; so, too, were the three making no contribution at all. Urban authorities have in the past contributed very little to primary education; a situation which amounted to a concealed subsidy of town-dwellers by rural taxpayers and which resulted, partly, from the political power of the towns, partly, from the difficulties of administering a system of urban taxation and, partly, from the towns' responsibilities for maintaining urban services. By an agreement between the Government and the Association of Town Councils, each urban authority contributed 5 per cent of urban primary school expenditure in 1963 and 12.5 per cent in 1964; in 1965, urban authorities became subject to the rules governing the expansion of education by rural authorities.

In the course of inter-ministerial discussions preceding the drawing up of the plan, the Ministry of Local Government argued on behalf of the local authorities that they would be unable to expand their recurrent revenue for education by more than 7.5 per cent per annum, bearing in mind their limited capacity to tax and their responsibilities for other communal services such as health and roads; and that a higher rate of increase could only be realized at the expense of essential, though politically less popular, services. Indeed, the first projections of revenue for primary education were made on this basis of 7.5 per cent. Past experience, however, has shown that the contribution of local authorities to approved expenditure on education has increased at a much faster rate. (See Table 8.) Also, the total revenue of local authorities, excluding transfers from the Government, increased by 21 per cent per annum during the period 1959-62. On the other hand, it can be argued that the local authorities are now reaching the limit of their capacity to tax. Unfortunately there is not enough information available at present to settle this question: since it is a key consideration in the formulation of any plan for primary education, it deserves further research. The original figure of 7.5 per cent was subsequently

revised upwards and, though the plan did not provide any precise figure, the revision implied the doubling of the rate to 15 per cent.¹ The plan simply made it clear that local authorities will have to continue to raise large extra sums from their own local resources. The contribution of the local authorities was treated as the residual variable in the plan, and it is in this respect that tensions and pressures are most likely to appear.

As primary education is by no means evenly spread throughout the country, the question arises of how to reconcile equality of opportunity for primary education with the need for economic efficiency. There is little statistical information available on the distribution of primary enrolments and its relation to local prosperity. It is possible to estimate the size of the 7 to 14 age group for each of the eight regions, but the figures for enrolment are readily available only for the seventeen administrative areas. As for income per head, data are available for each of the eight regions for 1962, and reveal considerable variations, ranging from £12 per annum in the Central Region to £41 in the Eastern Region including Dar es Salaam.² It is thought that educational endowment is related to regional prosperity, but this relationship cannot be proved statistically.

Now if the objective is to reach certain educational targets at a minimum cost to the Government, then the appropriate policy would be to concentrate educational development in wealthy areas, which can afford to meet the cost of expansion themselves. In this case, the local authorities' recurrent revenue for education could be expected to increase rapidly. However, such a policy would favour the richer local authorities, and favour most those which are paying least towards the cost of existing facilities; these are sometimes the local authorities already well provided with primary schools.

If, on the other hand, the Government's objective is equality of educational opportunity, then the right policy would be to even up regional differences in educational provision by giving greater assistance to poorer and educationally less developed areas. Since these are often sparsely populated, additional expense would be required to provide the necessary boarding facilities.

Political pressures tend to favour the first of these solutions; in the generally prosperous areas which are already well provided with primary schools, there is a strong demand for expansion and a strong public pressure to back up this demand. The Tanzanian subvention system appears to favour the 'efficient' solution; the policy of raising the contribution of all local authorities to 50 per cent of their total approved expenditure and thereafter treating them on a uniform basis does nothing towards reducing regional inequalities in educational provision. No doubt, some implicit and minor assistance is given to the poorer local authorities through the operation of teaching allowances: 'approved' expenditure is based on average

1. A.C. Mwingira; Simon Pratt, *op. cit.*

2. *The National Accounts of Tanganyika, 1960-1962*, May 1964, p. 67.

salaries, while the poorer authorities generally employ less experienced teachers at salaries lower than the average. Some assistance is also given to the poorer authorities by the payment of larger capital grants. As against this, the lack of grants for the provision of boarding facilities and the exclusion of boarding expenses for subvention purposes constitute a handicap for the poorer and more remote areas.

If a more egalitarian policy were to operate, and local authorities were to be given subventions in an inverse ratio to their degree of prosperity, what should be the criterion on which to base these subventions? If it is to be the enrolment ratio, then up-to-date and accurate statistics of enrolment ratios would have to be available. At present they are not, but they could be provided by the population census scheduled for 1967. It has been argued, however, that the present implicit ways of favouring poorer and educationally backward local authorities are administratively simpler and politically safer than the explicit methods. In any case, this question of equality versus efficiency is a political one; it cannot be decided by educational planners, who should indicate only the financial implications of an egalitarian as contrasted with an 'efficient' policy.

A significant part of recurrent revenue is represented by fees. The minimum prescribed fees are as follows: day pupils, £0.5 per annum in standards I to IV, £1.25 in standards V to VI, and £2.0 in standards VII to VIII; boarding pupils in standards V to VIII, £12.5 per annum for boys and £10.0 for girls. Local authorities are permitted to remit fees at public schools under their administration up to a maximum of 20 per cent for day pupils and 33 per cent for boarding pupils in standards V to VIII.

Fees paid in day schools are expected to cover the recurrent cost of equipment, textbooks and materials. Since the level of fees is very much a political matter, it has remained unchanged since 1954; in consequence expenditure on equipment could hardly be expected to be what an educationist would recommend and there is good reason to believe that expenditure on equipment is lagging behind other recurrent expenditure. There is a strong case for entirely dissociating the level of expenditure on equipment from the level of tuition fees, especially as the former accounted for only 9.6 per cent of total recurrent expenditure in 1963. (See Table 10.) However, the mere provision of separate funds for equipment does not mean that they will be used for that purpose, if the past is any guide. But since the training and appointment of district education officers, the Government is progressively gaining greater control over the use of subvention payments, which are now kept in an account separate from that in which local authorities keep their other funds.

The fees paid in boarding schools are supposed to cover the total cost of boarding. In fact, they do not, because the boarding fee of £10 (girls) and £12.5 (boys) falls short of the estimated boarding cost per boarding pupil in 1963 of £15.4, and the

TABLE 10. Recurrent expenditure on primary education by item in 1963

Item	£ thousand	Percentage
Personal emoluments	2 882.0	65.4
School equipment	422.5	9.6
Boarding	719.5	16.3
Other	384.0	8.7
Total	4 408.0	100.0

NOTES

Further breakdown (e.g. for maintenance of fabric) is not possible owing to lack of data for voluntary agency schools

Boarding expenditure includes expenditure by voluntary agencies on school amenities

A breakdown of expenditure for government, local authority and voluntary agency schools shows differences in percentage expenditure on various items. These can be explained in terms of accounting procedures or by the fact that government schools are all urban or

girls' upper primary schools. We cannot infer from this comparison any differences in educational policy or 'efficiency' in running schools

SOURCE

Ministry of Education. *Annual report, 1963, Table VI*

estimate of £20 used in the plan projection. These boarding costs have to be compared with a national income per head of £24 per annum. Yet with a wide dispersal of pupils it is difficult to dispense with boarding schools. Some 44 per cent of upper primary school classes were boarding classes in 1963, but it is government policy that all new primary classes should be day classes.

In reality, a single financial hurdle in the educational system is sufficient to produce inequality of opportunity. However free post-primary education and however efficient the selection procedure on the basis of merit may be, the need to pay boarding fees at upper primary schools affects the selection of pupils for further schooling.

The projection of recurrent expenditure

The first step in projecting expenditure is the calculation of the average cost per pupil in the base year. However, it is not sufficient to calculate the average cost of all primary school pupils if there are important differences as between standards and if enrolment is to be expanded at different rates for different standards. But ascertaining costs for each standard or group of standards is not a simple matter: teachers with different qualifications and different salaries are not evenly distributed between the different standards; to calculate the average salary cost by standard, we need information on the distribution of teachers by standard and qualification, and such information is not yet available in Tanzania. For the purpose of costing, therefore, it was assumed that the actual distribution of teachers conforms to the Ministry's establishment policy. Average salaries of teachers by qualification were determined by choosing the most probable combination of average salaries of the various grades consistent with the known total expenditure on salaries in 1963. On

this basis, the average salary cost per pupil was calculated as shown in Table 11.

Non-salary tuition costs were assumed to equal the expenditure per pupil—on equipment, maintenance of buildings, and administration—which is approved for purposes of the subvention.

Table 11 shows the average cost per pupil by standard. It also shows how meaningless is 'the average cost of primary education', because it conceals large differences in unit costs between different standards, between half-day and full-day attendances, between day and boarding classes.

When projecting expenditure, it is necessary to take account of the factors which are likely to alter recurrent costs during the planning period. One such factor is the

TABLE 11. Recurrent cost per pupil primary education, 1963

	Standards			
	I and II	III and IV	V and VI	VII and VIII
Teachers:				
grade A	—	—	—	700
grade B	—	—	817	283
grade C	3 194	4 956	871	279
Total	3 194	4 956	1 688	1 262
Pupils (thousand):				
half-day attendance	262.4	82.5		
full-day attendance		137.2	69.5	35.1
Cost per pupil (in £)				
Teacher's salary per pupil				
half-day attendance	2.8	3.2		
full-day attendance		6.3	7.3	14.8
Other approved expenditure per pupil	0.9	0.9	2.0	3.4
Total tuition cost per pupil				
half-day attendance	3.7	4.1		
full-day attendance		7.2	9.3	18.2
Boarding cost per pupil			15.4	15.4
Total cost per boarding pupil			24.7	33.6

SOURCE Ministry of Education

NOTES

These are local costs only; they exclude aid cost in the form of 'overseas addition' to the salaries of expatriate teachers, amounting to £0.04 per primary pupil in 1963.

The number of teachers was calculated by assuming one teacher for every two classes in half-day classes of standards I to IV and one teacher per class in full-day classes of standards III to VI. All remaining teachers were assumed to teach standards VII to VIII, yielding a teacher/class ratio of 1.3. It was assumed that the highest standards take the most qualified teachers, the only exceptions to this rule being that the surplus of teachers over classes in standards VII to VIII was assumed to comprise grade C staff.

The estimates made of average salaries were £227 per annum for grade C teachers (implying an average of 8.5 years of service), £380 for grade B teachers (implying 11.5 years) and £500 for grade A teachers (implying 11.5 years of service).

Boarding expenditure per pupil was calculated on the assumption that boarding classes are of average size.

The estimates of 500 A and 1300 B teachers in *Annual report, 1963* were found to be inconsistent with the more accurate figures collected for 1964.

average size of class. Expenditure other than on teachers rises proportionately with the number of pupils, but the cost of a teacher is independent of the size of the class. Thus a larger class entails a higher cost per class but a lower cost per pupil.

With regard to class size, an important factor is 'wastage', the dropping out of pupils from year to year, because it often results in unused places in the class-room and a consequent rise in cost per pupil. In 1963, the average size fell from forty-one in standards I to II to thirty-seven in standards III to IV, and from forty-one in standards V to VI to thirty-six in standards VII to VIII. It should be borne in mind, however, that the differences in class-size could simply reflect a recent change in entrance policy. In order to avoid drop out, a regulation was introduced for public primary schools in 1965, whereby individual local education authorities could ensure that pupils who start a lower or upper primary course must complete it. If this order can be implemented, the additional unit cost due to wastage should be eliminated. In the working papers for the plan, enrolment was projected on the assumption that additional classes would contain forty-five pupils in standards I to IV and forty pupils in standards V to VIII, though the economies to be gained by increasing enrolments in existing classes were apparently not considered. If this policy had been fully implemented with respect to all classes in 1963, the average tuition cost per pupil would have been £3.4 in standards I to II, £3.4 for half-day attendance and £5.9 for full-day attendance in standards III to IV, £9.5 in standards V to VI, and £16.6 in standards VII to VIII. This would have meant a saving in all except standards V to VI; being as much as 18 per cent in standards III to IV.

Changes in the qualification composition of the teaching force also affect average costs. The current policy of the Ministry is to use a grade C teacher for every additional class in standards I to VI, and two grade A teachers plus one grade C teacher for every two additional standard VII to VIII classes. This implies an actual decrease in average cost in standards V to VI to the extent that grade C teachers are not promoted to grade B, which is now a promotion post only. There is evidence, however, that the establishment policy has not been adhered to in the last few years. The fall in average costs in upper primary classes between 1962 and 1963 was due, it seems, to the low qualification of new teachers engaged to meet the rapid expansion of enrolment. If, after the conversion to a seven-year primary system, teachers in all the upper classes were to be as qualified as those in standards VII to VIII in 1963, tuition cost would rise by £7.5 per pupil and expenditure on tuition by 80 per cent in standards V to VI. Because there are no untrained teachers in the public primary schools of Tanzania, the rise in average cost owing to the changing composition of the teaching force is probably not as important as in those African countries where the first problem is to eliminate untrained teachers.

Another factor affecting cost per pupil is the movement of teachers' salary scales. The Ministry of Education, in drawing up the plan, was specifically in-

structed not to assume any changes in salary scales. A similar directive was given to all ministries, on the reasoning that a general rise in salaries would simply cut back all the ministries in roughly the same proportion. It is probable, however, that teachers' salaries will rise over the planning period. In fact, they have risen with effect from 1965 by 7, 10 and 15 per cent approximately for grades A, B and C respectively, the least-paid teachers receiving the largest increase in line with the Government's policy of equalizing money incomes. Moreover, consumption per head is planned to rise by 2.6 per cent per annum, and it would be contrary to past trends if teachers' salary scales did not rise by this percentage at least. Of course, the scales might not rise in real terms if the supply of educated manpower were to grow faster than the demand for it; but the manpower plan was drawn up on the basis that supply should simply keep pace with demand. A realistic assessment would, therefore, take account of the rise in salary scales.

It may be necessary to take account of 'incremental creep' resulting from movement up the incremental salary scale over time. The simple method of making allowance for this factor is to assume that the age structure (correlated with years of service) of the expanded stocks of grade A, B and C teachers remains stable, i.e., that over time there is the same proportion of teachers of each grade with one, two, three... years of service. If this is the case, the average salary of each grade of teacher does not change over time, and it can be assumed that additional teachers are paid the average salary. In fact, the average salary depends partly on the rate of expansion: since most additional teachers start at the lowest rung of the scale, a rapid expansion of the teaching force tends to reduce the average salary. Furthermore, a high rate of wastage, in the form of resignations or retirements from the teaching force, also tends to lower average salaries. Unfortunately, owing to lack of data, it was not possible to quantify the rate of the incremental creep. Perhaps the greatest deficiency in Tanzanian educational statistics is the lack of accurate data on teachers—their qualifications, age, experience, sex, deployment and salaries. An opportunity for the collection of this information has been provided by the establishment of the Unified Teaching Service.

Lastly, in making projections, account must also be taken of policy decisions. For instance, expenditure was projected on the basis of the decisions that all expansion of standards V to VIII would be in day classes, and that half-day attendance in standards III to IV would be eliminated at a certain rate.

In the first working papers for the plan, the projection of recurrent expenditure was made on the following assumptions. Entry to standard I was to increase by about 2,000 pupils per annum; the average cost was to rise by 2 per cent per annum over that calculated for 1962 in standards I to IV, owing to incremental creep; some 5,000 to 6,000 additional pupils per annum were planned for entry into standard V, the average cost rising by 3 per cent per annum in standards V to VIII owing to incremental creep.

The projections themselves are easy to criticize; they ignored the economies to be gained by increasing the size of existing classes; on instructions, they ignored probable increases in salary scales; they did not take account of changes in the quality of the teaching force; they assumed rates of incremental creep which are hardly compatible with a rapidly expanding teaching force. However, they were inevitably prepared in a hurry and with inadequate data.

These first projections produced a total figure of £32.67 million for recurrent expenditure on primary education over the period 1964/65 to 1968/69, of which £15.22 million was for lower primary and £17.45 for upper primary standards. This figure was subsequently reduced by the following amounts: £2.67 million as a result of two cuts in upper primary enrolments; £1.98 million by a cut in average cost to take account of the fall in average salaries which had occurred between 1962 and 1964; and £0.4 million as a result of the introduction of a seven-year primary system.¹ The figure was thus brought down to £27.62 million.

This change in expenditure was accompanied by a change in the amounts financed from the different sources. The Government's contribution was reduced from 62 per cent to 47 per cent, and that of the local authorities raised from 24 to 36 per cent. (See Table 12.) Eventually, the contribution of the local authorities was determined as an arbitrary residual and was not published. It is a defect of the plan that it indicates only the Government's contribution.

The first projections involved an annual increase in standard I enrolment of 1.5 per cent and in standard V of about 10 per cent. This implied a constant enrolment ratio (enrolment expressed as a percentage of the relevant age group) of about 50 per cent for standard I children during the period 1964-69, and a rise from 19 per cent to about 28 per cent in the enrolment ratio of standard V children during the same period. As a result of the cut in planned upper primary enrolments

TABLE 12. Sources of finance for recurrent expenditure on primary education over the plan period

Source	1964-69				1963 Actual
	Initial	Final	Initial	Final	
	(£ million)	(£ million)	%	%	%
Central government	20.40	13.10	62	47	51
Fees	3.50	3.50	11	13	16
Voluntary agencies	1.06	1.06	3	4	4
Local authorities	7.71	9.96	24	36	29
Total	32.67	27.62	100	100	100

NOTE
The data are approximate as they were pieced together from diverse and sometimes conflicting sources

SOURCES
Ministry of Education
A.C. Mwingira; Simon Pratt, *op. cit.*

1. A.C. Mwingira; Simon Pratt, *op. cit.*

mentioned above, standard V enrolments were planned to increase by 4-6 per cent per annum, so that the enrolment ratio of standard V children will rise to only 21-25 per cent in 1969. It should be noted that these enrolment ratios are very approximate, since the last population census, from which data were obtained by five-year age group, took place in 1957. On the projection of population, the writer of the *Census Report* concluded with modest caution: 'Perhaps the only prediction which can be made with any degree of certainty is that any population forecast made from the available data will be falsified by the turn of events'.¹ The plan is purposely vague about the expansion of primary enrolments and does not give enrolment data for 1969. Instead, it states that the increase in enrolments 'will be determined largely by the capacity of local education authorities to bear their share of the recurrent cost of primary education'.² However, steps will be taken to ensure that 'the provision of places in lower primary schools keeps pace with the natural increase in population'.³ As for upper primary enrolment, the rate of expansion finally agreed upon seems to lie above the minimum required to ensure an adequate selection for secondary education and below what some consider to be the minimum politically feasible.

Capital revenue and expenditure

It is through the subvention system that the Government attempts to control primary education. However, class-rooms have often been built without government assistance, and then pressures have been brought to bear on the Government to approve such expansion for subvention purposes. Capital grants are not large enough to control the expansion of education, but they can be used as a means of controlling certain qualitative aspects of education—if they are made in accordance with certain priorities. The poorer and more remote rural authorities get capital allowances for improving conditions in schools and teachers' quarters so as to attract better teachers. Capital works needed for the reorganization leading to a seven-year primary system are generally grant-aided to the extent of 50 per cent, but poorer authorities may be paid in full. Grants on the same basis are made for construction necessary to replace grade C teachers by grade A teachers, and grants are also provided to eliminate half-day attendance.

The general objective of the grants is to maximize the contribution of local authorities and voluntary agencies, and in this way to raise the quality of school buildings. Grants are made only on condition that a given contribution is provided locally, whether in the form of cash, labour or materials. The local authorities in

1. *African Census Report, 1957, 1963*, p. 97.

2. *Tanganyika Five-Year Plan...* (see our bibliography), Vol. I, p. 67, note to table.

3. *Id.*, Vol. II, p. 113.

turn pay out part of their grants to voluntary agencies, again imposing conditions. As already mentioned, the voluntary agencies pay very little towards the recurrent costs, their main financial contribution lying in the construction of schools.

Because of the decentralized nature of capital expenditure on primary education, much of it has not been recorded. However, Table 13 provides some evidence of the way in which it is financed. It is interesting to note that by means of £50 grants totalling £10,400, class-rooms to the total value of £105,450 were completed. In other words, the non-government contribution was in this instance about nine times as large as the Government's contribution.

In 1964/65 the capital grant for rural primary schools was increased from £50 to £150 per class, but the Government now insists on permanent or semi-permanent class-rooms, the average value of which is expected to be £400. This increase has strengthened the Government's control over local construction, since local authorities now have more to lose if they reject a grant and the control which accompanies it. In 1964/65 a new 50 per cent capital grant was introduced for the provision of teachers' houses, up to a maximum of £300 for a grade C teacher and of £600 for a grade A teacher, but in practice this grant is made only to the poorer and sparsely populated parts of the country which have difficulty in attracting teachers. Apart from the information provided in Table 13, no data are available on the use to which capital funds are put.

Capital expenditure on primary education was initially projected on the following basis. Cost per class (including teachers' quarters) was put at £1,000, £2,000,

TABLE 13. Government capital grants and resultant capital expenditure on primary education, 1963/64

Value of grant in £	Nature of building	Value of building	Number of grants	Total grant paid	Total value of buildings
		£	£	£	£
50	'Permanent' class-room	600	135	6 750	81 000
50	'Semi-permanent' class-room	450	52	2 600	23 400
50	'Temporary' class-room	50	21	1 050	1 050
50	Total £50 grant class-room	—	208	10 400	105 450
1 200	Standard VII and VIII class-room	1 500	45	54 000	67 500
100%	Certain upper primary schools	—	—	149 390	149 390
	Total			213 790	322 340

NOTES

Not all the 1963/64 grants were paid entirely in 1963/64 and not all estimated construction was completed in the financial year. Thus it would be misleading to say that total capital expenditure on primary schooling amounted to £322,340 in 1963/64. Moreover, this total excludes non-aided capital expenditure by local authorities or voluntary agencies

The table excludes 128 £50 grants on which reports had not been received. Most of the 100% grants are for urban buildings

SOURCE Ministry of Education

£2,300 and £4,000 respectively for standards I to II, III to IV, V to VI and VII to VIII, the cost in standards I to II being half of that in standards III to IV owing to half-day attendance. Total capital expenditure over the planning period was thus put at £12.8 million, of which £6.7 million was to be provided by the Government. However, by a process of elimination not made public, these estimates were whittled down to those contained in the plan, i.e., a total of £5.0 million, of which £2.7 million was to be provided by the Government.

Part of the capital expenditure on primary education is to be financed by foreign aid. Since part of this aid is 'tied' to imports of the donor country, prefabricated buildings have to be imported. Should the Government rely more heavily on self-help methods, so making the foreign aid available for other uses, and using local resources which might otherwise not be touched? A difficulty about self-help is that it is relatively easy to get local communities to build primary class-rooms, but not so easy to get them to build teachers' houses or to maintain the class-rooms. The standard of self-help buildings is often poor, and their deterioration rapid. Nevertheless, local initiative might be harnessed even in the building of permanent structures. For instance, it should be possible to require local people to prepare a site and provide local materials before the arrival of skilled construction workers.

3 Secondary education

Secondary education takes place in government and voluntary agency schools. In 1964 there were twenty-eight government schools and forty voluntary agency schools of which all but five received government assistance. A recent regulation limits non-citizens to 2 per cent of public secondary school places. As a result, the number of places in the private voluntary agency schools is expanding, mainly on account of the Asian community.

Most secondary schools—forty-four out of the sixty-three public schools—are boarding schools, a fact which reflects the low participation rate (about 1.5 per cent of the relevant age group) in secondary education and the wide dispersal of the population. The location of secondary schools in the past was haphazard, governed largely by demand or missionary activities. The present policy is that schools should draw pupils from within their regions, and the location of new schools is being planned accordingly.

In 1964, there were 18,890 pupils in forms 1 to 4¹ preparing for the Cambridge School Certificate, and 1,130 in forms 5 and 6 preparing for the Higher School Certificate. The latter were spread over eleven schools, of which only one, the high cost ex-European school at Mkwawa, does exclusively HSC work.²

Recurrent revenue and expenditure

The financing of government schools differs from that of voluntary agency schools. The former present estimates of recurrent expenditure which are used as a basis for the allocation of funds to each school. Mid-year allocations are usually made in the

1. Secondary grades are referred to as 'forms' in Tanzania.

2. The School Certificate is received following an examination which may normally be taken after four years of secondary schooling. Six years is normally required for the Higher School Certificate.

light of requirements which have arisen since the original estimates at the beginning of the year. This makes for considerable flexibility, in that it is possible for the Ministry to allocate additional funds or withdraw surplus funds according to the circumstances. On the other hand, the voluntary agency schools are paid grants for teachers' salaries, and grants for other approved expenses on a prescribed per pupil basis, without any possibility of adjustment; any additional funds they must provide themselves.

Total recurrent expenditure amounted to £1,316,000 in 1963. The Government provided 78 per cent of the funds, the voluntary agencies 4 per cent, and 18 per cent came from fees. However, the voluntary agencies received some 38 per cent of the total funds in the form of grants from the Government. The main contribution of voluntary agencies now consists in managing schools and attracting teachers rather than in the provision of funds for recurrent expenditure.

Prior to 1964, fees were charged in all secondary schools at the rate of £24 per annum for day schools and £48 for boarding schools. In addition, pupils were required to pay examination fees. There was a system of fee-remission administered locally on an *ad hoc* basis. The remission rate varied between regions and according to harvests. In 1963 the average fee actually paid was £15. However, the system was not a success; selection for entrance to secondary schools was on the basis of merit, but remissions often went to the children less in need of support, so that the 'wastage' rate was high. These were no doubt some of the reasons which led to the abolition of fees in 1964.

At what economic cost were fees abolished? The revenue from fees in 1963—had it been available in 1964—would have financed an additional 3,000 boarders. On the other hand, the 1963 revenue of £234,000 could equally well have been raised by a further tax on beer which would have put the price of beer up by 5 per cent. In fact, such a tax was imposed in the 1965 Budget and was expected to raise £225,000. Since school fees are not a subject on which rational decisions are easily made, it is important for planners to point out the economic and educational implications of alternative policies.

If fees are considered to impede selection on merit for secondary education, other forms of payment might be explored, such as the obligation to work for the Government for a certain period at a given salary. Such a scheme was, in fact, announced by the Government in June 1965: all persons with some post-primary education who are about to enter employment can volunteer for the scheme; after three months of orientation, they take up employment in the ordinary way, but for twenty-one months receive only 40 per cent of their salary plus free board and lodging, the remainder of the salary being paid to the Government. The primary object of the scheme is social—to integrate the educated into society—but it is also a means of delayed fee collection. For instance, a person with a Higher School Certificate who finds employment at £300 per annum would pay about £260 over

his period of service (allowing £50 per annum for board and lodging), i.e., some £43 for each of his six years of secondary education. The fact that the scheme is voluntary suggests that certain benefits, such as promotion, will flow from membership.

Recurrent expenditure by item is shown in Table 14. The fall in personal emoluments between 1962 and 1963 was due largely to the replacement of experienced expatriate teachers who retired or resigned by newly graduated expatriate teachers engaged on short-term contracts. Boarding expenditure increased owing to the larger proportion of boarding places.

Voluntary agency schools receive grants to cover the salaries, including passage and leave in the case of expatriates, of approved teaching staff, grants of £5 per pupil per annum for maintenance of equipment in forms 1 to 4 and of £15 in forms 5 to 6, administrative and upkeep grants of £4 per pupil per annum, and boarding grants of £24 per pupil per annum; but they are free to spend these grants as they choose, subject to scrutiny by school inspectors. Approved teaching posts are allocated on the basis of 1.5 teachers per class of thirty-five pupils in forms 1 to 4 or per class of twenty pupils in forms 5 and 6. Government and voluntary agency schools are treated on the basis of equality; but there is greater flexibility in the financing of government schools in that initial estimates can be revised.

Unfortunately, voluntary agency schools were not required to submit accounts in the past, so that we know little about the amount and the distribution of actual expenditure. Their estimated contribution—4 per cent of recurrent expenditure—is a guess, and the distribution of expenditure as shown in Table 14 is based on the assumption that voluntary agencies allocate their expenditure in accordance with the object of the grants. However, a recent regulation requires all public secondary schools to submit accounts on forms specially devised for this purpose. This should provide some reliable information on the amount and distribution of actual expenditure in voluntary agency schools.

TABLE 14. Recurrent expenditure on secondary education by item

	£ thousand		Percentages	
	1962	1963	1962	1963
Personal emoluments	829.5	820.0	68.3	62.3
Equipment and materials	72.5	101.5	6.0	7.7
Boarding	167.0	246.5	13.7	18.7
Other	146.0	148.0	12.0	11.3
Total	1 215.0	1 316.0	100.0	100.0

NOTES

Expenditure on 'personal emoluments' in the form of 'overseas addition' paid by foreign governments is excluded from the table. The item 'equipment and materials' cannot be broken down further into, e.g., expenditure on books.

SOURCE

Ministry of Education. *Annual reports*, 1962 and 1963.

The projection of recurrent expenditure

The over-all cost per secondary pupil can be obtained by dividing total recurrent expenditure by total enrolment. But the cost per pupil thus calculated is of little use for planning purposes, because it conceals the large differences in cost between forms 1 to 4 and 5 to 6, and this difference is important if the rates of expansion of these two levels are not the same.

In order to calculate salary costs per pupil at these two levels it was assumed, in accordance with establishment policy, that all teachers of forms 5 to 6 are graduates and that there are 1.5 teachers per class. Owing to lack of data, the average salary per teacher of each qualification had to be estimated by choosing the most likely of the combinations consistent with the known total salary bill. It was thus possible to calculate the average teacher salary per pupil for forms 1 to 4 and 5 to 6 separately. Non-salary costs were determined by assuming that they were equal to the various grants per pupil made in respect of forms 1 to 4 and 5 to 6. On this basis, local recurrent cost per boarding pupil was estimated separately for forms 1 to 4 and 5 to 6. (See Table 15.) Given the inadequacy of the data available, these estimates must be considered very approximate.

The educational planners in Tanzania think in terms of local cost rather than total cost, which includes aid from abroad, because they are concerned with the allocation of local resources. The 'overseas addition' to the salaries of expatriate teachers, which is guaranteed by their respective governments, is not part of the education vote and is not considered as a scarce resource by the Ministry of Education. The overseas cost per pupil is indicated in Table 15. There is also the gratuity which teachers on contract terms receive on the termination of contracts and which is equal to 25 per cent of the salary earned. This gratuity is paid by the Tanzanian and foreign governments in proportion to the local and overseas components of salaries, but it is paid by the Tanzanian Treasury, which does not separate teachers from other contract officers, and it does not pass through the accounts of the Ministry of Education. For this reason, no allowance for this item is made by educational planners, though, logically, it should be taken into account. The gratuity cost, calculated by rule-of-thumb methods, is also indicated in Table 15.

The next step in the projection of recurrent expenditure is to estimate the likely changes in cost per pupil. The educational planner must constantly study ways in which unit costs can be reduced without a lowering of educational standards, or, inversely, ways in which educational standards can be raised without increasing unit costs. One difficulty is to define what 'educational standards' are, another how they can be measured. But there is no doubt that educational standards are affected by quantifiable factors, such as the number of teachers of various qualifications, the number of teachers and pupils per class, the amount of equipment used, etc. How

TABLE 15. Recurrent cost per pupil in secondary education in 1963

	Forms 1 to 4	Forms 5 and 6
Pupils	16 421	755
Classes	470	42
Average size of classes	34.9	18.0
<i>Distribution of teachers:</i>		
Education Officers, grades I and II	552	63
Education Officers, grade III	78	—
Grade A	75	—
Total teachers	705	63
<i>Local cost per pupil (in £):</i>		
Local salary cost	43.5	113.6
Non-salary tuition cost	8.1	18.0
Local tuition cost	51.6	131.6
Boarding cost	24.0	24.0
Transport cost	3.5	5.0
Total local cost	79.1	160.6
Overseas cost per pupil	6.8	16.7
Gratuity cost per pupil	2.8	7.0

SOURCE Ministry of education

NOTES

Education Officers grades I and II are graduates, Education Officers grade III have HSC plus Teacher's Certificate, and grade A teachers, SC plus Teacher's Certificate

Grade A teachers were assumed to have an average salary of £ 400, Education Officers grade III a salary of £ 800, and the average salary of graduates was derived from the total local salary bill as a residual, equal to £ 1,150 per annum

Because forms 5 and 6 draw pupils from a wider geographic area, the over-all average transport costs of £ 3.6 was assumed to combine a figure of £ 5.0 for forms 5 and 6 and £ 3.5 for forms 1 to 4

would a change in these variables affect the unit cost, and what allowance should be made for changes in unit cost over the planning period?

Let us consider, first, the qualifications of the teachers. If, instead of 78 per cent, all teachers were graduates, the cost per pupil in forms 1 to 4 would rise by £ 4. But if graduates were reduced from 78 to 50 per cent of the teaching force and the 28 per cent replaced by Education Officers grade III, the unit cost would be reduced by £ 4. However, the working papers for the plan did not specifically take into account any changes in the qualifications of the teaching force.

Variation in teachers' hours would also affect average cost. If teachers were required to give twenty-five hours of tuition per week instead of twenty hours as at present, the teacher/class ratio could be cut from 1.5 to 1.2, and recurrent cost per pupil in forms 1 to 4 by over £ 8. However, there is a fairly strong case at present against increasing the work-load of teachers; Tanzania is heavily dependent on expatriate teachers for whom it must compete with other African countries, and any worsening of the terms of service would affect recruitment from abroad. Such

a measure would have to be delayed until the great majority of teachers are drawn from Tanzania.

Yet another variable is the size of the class. In 1963, the average was 34.9 in forms 1 to 4 and eighteen in forms 5 and 6. The projections in the first working papers assumed that additional classes would contain thirty-five and twenty pupils respectively; the change from eighteen to twenty pupils in forms 5 and 6 would lower the unit cost by £11 per annum. But the projections did not take into account any change in the size of the existing classes.

The boarding grant is £24 per pupil per annum and is based on a daily allowance for food of 1.2 shillings per day for thirty-nine weeks a year, i.e., £16.4 per annum. But a nutrition expert within the Ministry has calculated that the cost of a 'balanced diet' as defined by international standards, and without which learning capacity is said to be impaired, amounts to 1.86 shillings per day, or £25.4 per year, in one region, and 1.66 shillings or £22.7 respectively in another region. However, it is no use increasing the food grant unless food is properly handled and cooked, and this has not always been the case in the past. Courses have now been started for the training of school cooks. It may be added, however, that even the present boarding diet is considerably better than that of most pupils in their homes, as shown by the weight and health of pupils before and after school holidays.

The plan projections were made on the assumption that all additional classes would be boarding classes. It is current policy to convert even the existing day schools in towns into boarding schools, so as to provide more opportunities for rural pupils. At present, the existence of day schools ensures easier access to secondary education for urban dwellers, many of whom are non-African. Whereas only one rural child in four completing the primary school course in 1963 entered secondary school in 1964, every second urban child was able to do so. The low population density presents a problem for opening large day schools in rural areas. However, even in the more densely populated areas, such as Mushi and Arusha, boarding schools are replacing day schools. It is interesting to note that in Kenya, which is more densely populated than Tanzania, the trend is in the opposite direction: a number of small secondary day schools are being established, but as a result of regional pressures rather than of conscious policy.

The working papers for the plan assumed an increase in cost per pupil of 2 per cent per annum; this being attributed to the 'incremental creep' associated with an ageing teaching force. Owing to the lack of data on teachers, it is not possible to calculate this incremental creep, but doubt may be cast on the figure of 2 per cent per annum: the average tuition cost for secondary education as a whole fell from £75 in 1962 to £62 in 1963. Moreover, a study of the *Staff Lists* for 1961 and 1964 shows that, in government schools, experienced pensionable teachers were rapidly being replaced by young expatriates engaged on contract terms; and the incremental creep in contract appointments is negligible.

With regard to teachers' salaries, it should be borne in mind that secondary school teaching will be one of the last professions to be Africanized in Tanzania. In fact, the recruitment of local graduates is not planned to start on any scale until 1967. In some African countries, local recruitment of teachers is impeded by the relatively low salaries and prestige which the profession enjoys. In such cases a relative increase in salaries will have to precede Africanization. But in Tanzania, all university students receiving government support are bound to serve the Government for five years after graduation in any job to which the Government directs them. As the starting salaries of graduate teachers are the same as those of graduates in other occupations, and as the promotion prospects are fairly good, the salary scales of graduate teachers will probably move in line with those of graduates in general, and these will depend largely on the supply of graduates in relation to the demand. Until a surplus appears, graduates will continue to secure their share of the general increase in consumption per head envisaged in the plan. The fact that the Ministry of Education was instructed to assume no rise in salary scales is liable to distort the expenditure projections.

The first working papers for the plan were based on the following assumptions. Enrolment in forms 1 to 4 was to increase by about 1,400 per annum, and that in forms 5 and 6 by 240 per annum, with all additional enrolment to be in boarding classes. The increase in average cost, as calculated in 1962, was put at 2 per cent per annum. The projections may be criticized on the same grounds as those for primary education; with more data and time available, they will no doubt be improved upon in the future. The total for the period 1964/65 to 1968/69 was put at £11 million, of which £9.52 million for forms 1 to 4 and £1.48 million for forms 5 and 6. This was cut in subsequent inter-ministerial discussions by £0.4 million on account of the fall in the cost per pupil which had occurred between 1962 and 1964, and by a further £0.6 million which, if it were to be spent at all, would have to come from non-government sources. Thus the figure for government recurrent expenditure given in the plan is £10.0 million.

Unlike that for primary education, the projection of recurrent expenditure for secondary education was based on specific manpower projections supplied to the Ministry of Education by the Directorate of Development and Planning. These imply an enrolment in form 1 of 5,250 in 1964, rising to 7,070 in 1969, and corresponding to enrolment ratios of 2.4 and 2.9 per cent respectively, and an enrolment in form 5 of 680 in 1964, rising to 1,280 in 1969, and corresponding to enrolment ratios of 0.34 and 0.60 per cent respectively.¹

1. The enrolment ratios are very approximate, since the last population census took place in 1957.

Capital costs and expenditure

One of the difficulties in analysing capital expenditure is that expenditure in any one year is of little interest, because it does not indicate accurately the amount of building actually completed. One cannot deduce the increase in pupil places from annual data of capital expenditure, which are recorded by the Treasury or the Ministry at the time of payment, since payment may be made before work is started or after it has been completed. Government schools are built by the Public Works Department, but voluntary agencies receive grants and can contract with a building firm for work. These grants, amounting generally to 100 per cent of the cost, are paid in the proportions 50 per cent on approval, 40 per cent when the building reaches eaves level, and the remaining 10 per cent on satisfactory completion; but there may be a gap of six to eighteen months between the first and the last payment. It is, therefore, necessary to consider capital expenditure over the planning period rather than in any one year.

Before 1960, capital expenditure on secondary education was largely unplanned; voluntary agencies built when they could, which usually meant when they could obtain funds from foreign sources and government agreement to finance the recurrent expenditure. This was hardly satisfactory for the rapid and planned expansion of the 1960s. A loan of £1.64 million was negotiated with the International Development Agency (IDA) in 1963, and it is this loan which has largely financed building expansion since 1963. The loan carries a service charge of 0.75 per cent, is repayable over fifty years, and is conditional upon a local contribution of about 16 per cent, so that the programme amounts to £1.95 million. Total capital expenditure for the plan period amounts to £3.25 million, of which

TABLE 16. Unit capital costs in secondary education¹

	Forms 1 to 4	Forms 5 to 6
Pupils per class	35	20
Teachers per class	1.5	1.5
Unit cost per class (£) :		
Class-room	5 625	5 130
Boarding	4 375	2 995
Teachers' housing	3 750	3 750
Total	13 750 ^{3,3}	11 875 ⁴
Total cost per pupil (£)	393	594

SOURCE: Ministry of Education

NOTES

1. On the addition of a further stream to an existing school
2. If a new school is being established, the total unit cost per class is £15,000
3. Girls' classes cost about £1,230 more, owing to the domestic science facilities
4. On the assumption of a mixed stream of arts and science pupils. A pure science stream would be about £3,125 more per class

only £0.8 million is covered by the IDA loan. The Government is hoping that most of the remainder can be financed from abroad, and negotiations are now proceeding. Three schools are to be built independently of the Government during the plan period. Moreover, voluntary agencies are being forced by rising building costs to contribute to IDA financed projects. Unfortunately, no precise data are available on the contribution of voluntary agencies towards capital expenditure.

Whereas the IDA loan was based on *ad hoc* estimates for each school, the current programme is based on the cost per class, a procedure which has been facilitated by the appointment of an architect to the planning section of the Ministry of Education. These unit costs, shown in Table 16, are based on the experience gained in planning three new schools. The difference between the unit costs in forms 1 to 4 and 5 to 6 lies largely in the smaller size of class in the latter forms, with correspondingly higher cost per place not only of class-rooms, but also of teachers' housing; but one wonders whether the difference of 20 per cent in the unit cost of boarding accommodation is justified. The unit costs are lower in the case of additions to existing schools than in the case of new schools. Most secondary schools are two-stream, but the current policy is to expand them to take three streams, i.e., about 500 pupils.

The cost per place of a boarding pupil in forms 1 to 4 has increased from £280 in 1961¹ to £393 in 1965. This rise was due partly to the increase in building cost and partly to an improvement in building standards. But the unit costs of teachers' housing is the same as in 1961, thanks to economies made through standardization and rationalization. In future, all school projects entirely financed by the Government will be planned in closer consultation with the Ministry of Education and will have a clearly defined cost limit. This should provide greater control and increase building efficiency. It would appear that the general policy of the Ministry of Education is to raise standards rather than to economize on finance, largely because it is hoped that finance for secondary school building can be obtained on easy terms from abroad. The Ministry does not consider aid as the scarcest resource, and is prepared to use it abundantly, if, by doing so, it can achieve economies in the use of scarcer resources, such as educated manpower and local funds. It is argued that, if an increase in building costs can improve teaching facilities and thus raise the efficiency of teaching, an increase in capital costs per pupil may well produce a fall in recurrent costs per pupil. Another reason advanced in favour of high-quality buildings is that they would be helpful in attracting expatriate staff.

It can be argued, however, that foreign loans or grants generally require some local support, that loans involve interest and service charges, and that high-quality buildings involve high recurrent costs for maintenance and servicing, besides creating pressures for high living standards in general. It has also been suggested

1. *Report of the Unesco Educational Planning Mission to Tanganyika...*, op. cit., p. 98.

TABLE 17. Capital cost of single and double-session schools

	£ thousand		Percentage addition
	Single	Double	
Non-residential :			
Class-rooms	26.0	26.0	0
Other workrooms	27.7	29.1	5
Assembly room/dining-room/kitchen	21.5	22.6	5
Administration	7.3	10.2	40
Sanitary block and stores	5.0	7.0	40
Library	11.3	15.8	40
Total	98.8	110.7	12
Residential :			
Teachers' houses	60.0	120.0	100
Dormitories	51.0	102.0	100
Total	111.0	222.0	100
Total	209.8	332.7	59

SOURCES Ministry of Education ; Directorate of Development and Planning
 NOTE First column based on the cost of the new secondary school, Tanga

that capital cost of boarding accommodation could be cut drastically without detriment to teaching standards.

Another possible source of economies lies in the introduction of 'double-sessions'. At present, class-rooms are (or could be) used for about thirty hours a week (six hours a day, five days a week) for thirty-nine weeks a year. It would not seem impossible to use them in two sessions for ten hours per day and six days a week during the thirty-nine weeks, i.e., for sixty hours per week. The economies in capital cost which would result from such a system are shown in Table 17. No additional class-rooms are required, and the additional expenses of other non-residential buildings vary between 5 and 40 per cent. All in all, a doubling of enrolment in the form of two sessions would require an increase in expenditure on non-residential buildings of 12 per cent only. It would not be possible, however, to economize on residential buildings, i.e., teachers' accommodation and boarding accommodation, unless standards of the latter were drastically lowered. As expenditure on residential buildings amounts to more than half the capital cost of a boarding school, the over-all increase in building expenditure necessitated by the introduction of two sessions is almost 60 per cent.

Clearly, the economies resulting from the introduction of two sessions are much greater in the case of day schools than in that of boarding schools. In the case of day schools, they amount to 44 per cent if additional places are created by building a new school and to 88 per cent if they are created by converting existing schools to double sessions. The corresponding economies in the case of boarding schools

are 20 and 40 per cent respectively. Thus the current policy of converting day schools to boarding schools involves an additional cost inasmuch as the advantage gained from the introduction of two sessions is thereby reduced. On the other hand, the alternative policy of expanding enrolment by introducing the double-session systems in day schools, which are urban, would further increase the disparity in opportunities for secondary education as between urban and rural children. This is yet another case in which a political choice must be made between the conflicting claims of social equality and economic efficiency.

4 Technical education

Tanzania has one technical college in Dar es Salaam and two technical schools, formerly known as trade schools, at Moshi and Ifunda. Entry to the former requires generally twelve years of formal education and entry to the latter eight years. In this sense, the technical schools thus correspond to forms 1 to 4 of secondary schools, and the technical college to forms 5 and 6. The technical schools give craft training, and the technical college provides courses for training engineering technicians, secretaries, technical teachers, courses of secondary education with a technical bias, and also evening classes in technical and commercial subjects. Evening classes are also run in about ten major urban centres. All these activities are financed and administered by the Government; however, a number of voluntary agencies run small trade schools, partly to meet their own needs.

There has recently been a change in technical education so as to correspond more closely with manpower needs. Courses in electrical engineering, machine shop engineering and motor vehicle work have been expanded at the expense of those in brickwork, carpentry, painting and plumbing. Also, the technical school at Ifunda is being converted into a secondary school with a technical bias. The conversion started in 1964 and is to be completed in 1966.

Recurrent revenue and expenditure

The recurrent financing of technical education in 1963 is shown in Table 18. It should be noted that fees were abolished in 1964, when free schooling was introduced into secondary education. Moreover, all full-time college students who undertake to enter government employment for five years receive scholarships to cover their fees, though it does not follow that all of them will be required to work for the Government. There are very few private students at the technical college, but a scheme has been introduced whereby industry can sponsor students and pay

TABLE 18. Recurrent revenue for technical education in 1963

Source	£ thousand	Percentage
Government	160.0	71.1
Fees	18.0	8.0
Other appropriations-in-aid	22.0	9.8
Voluntary agencies	25.0	11.1
Total	225.0	100.0

SOURCE: Ministry of Education, *Annual report, 1963*, Table VI

NOTES

The table excludes all foreign aid. Foreign aid in the form of 'overseas addition' to salaries amounted to £26,100 in 1963.

The item 'other appropriations-in-aid', being a grant from the Ford Foundation for recurrent expenditure in the establishment of secondary technical courses at the technical college, has now lapsed.

their fees. These amount to £75 per annum for tuition and £125 for boarding, but bear no relation to the actual costs of tuition and boarding.

The contribution of voluntary agencies to craft training is not known. The voluntary agency craft schools were not aided in 1963, but the Government has since provided them with grants-in-aid, aimed at gaining control over the quality and quantity of their output. Since the recurrent contribution of voluntary agencies is not expected to be significant, the grants-in-aid are open to question, as the schools are left with the alternative of either teaching surplus traditional crafts, or teaching modern crafts without being able to achieve economies of scale.

TABLE 19. Government recurrent expenditure on technical education in 1963

Item	£ thousand	Percentage
Personal emoluments:		
Local salaries	118.0	51.0
Overseas addition	26.0	11.2
Gratuities	6.0	2.6
Total personal emoluments	150.0	64.8
Transport	8.0	3.4
Equipment and materials	21.0	9.1
Maintenance of plant, vehicles and equipment	3.0	1.3
Maintenance of fabric	7.0	3.0
Boarding	30.0	13.0
Other	12.5	5.4
Total	231.5	100.0

SOURCE: Ministry of Education, *Annual report, 1963*, Table VI

NOTES

The total does not tally with that of Table 18 for two reasons: (a) expenditure by voluntary agencies is excluded because it cannot be broken down by item of expenditure; (b) expenditure on gratuities and overseas addition are excluded from Table 18.

Gratuities were estimated by rule-of-thumb methods.

There is a significant amount of foreign aid available for recurrent expenditure on technical education. Expatriate teachers receive an overseas addition from their governments, and this amounted to 22 per cent of the salary bill. A number of teachers are sponsored and entirely paid for by foreign governments, but no records of these payments are kept in Tanzania. However, rough estimates made for Moshi and Dar es Salaam for the financial year 1964/65 give a figure of £48,000, i.e., 46 per cent of the recorded salary bill at these institutions. Another form of aid is the training abroad of Tanzanians as technical teachers at very little cost to the Tanzanian Government.

Government recurrent expenditure on technical education is shown in Table 19. Boarding was provided for all pupils at the technical schools, but for a proportion only (42 per cent in 1965) of full-time pupils at the technical college. The current policy is to increase the proportion of boarding places at the college so as to provide more opportunities for rural children.

The projection of recurrent expenditure

The difficulties of calculating unit costs of technical education are illustrated by Table 20, showing enrolment by institution and type of course. Clearly, an over-all cost per pupil would be meaningless, since there are at least four types of technical education, each with a different unit cost. On the other hand, the only financial breakdown available is by the three major technical institutions, and it is not at all easy to distinguish between different types of training at the same institution. The Ifunda technical school has both secondary and craft pupils; the technical college has part-time as well as full-time pupils. To overcome these difficulties, we calculated the cost per pupil at Moshi, which has only craft pupils, and applied this cost to craft pupils at Ifunda, thereby isolating expenditure on secondary technical pupils as a residual. Part-time pupils at the college were converted into full-time equivalents. Staff salaries financed entirely by foreign governments, of which no

TABLE 20. Technical enrolment by type of course and institution in 1965

	Ifunda	Moshi	Dar es Salaam	Total
Secondary technical	235		58	293
Craft	150	484 ¹		634
Post-secondary			582	582
Part-time			1 670	1 670
Total	385	484	2 310	3 179

SOURCE: Ministry of Education

NOTE

1. Including 76 pupils enrolled for five months before proceeding to the technical college

records are available, were roughly estimated; but in future, the cost to the Tanzanian Government of filling these posts should be estimated, since expatriate staff will be replaced as more local teachers are trained.

Recurrent costs per pupil are shown in Table 21. The estimate of £131 for the local recurrent cost per craft pupil exceeds the earlier estimate of £110 contained in the Tobias report;¹ this being partly due to the switch, already noted, from the construction crafts to the engineering crafts. The local cost of a secondary technical pupil, i.e., £102 per annum, is half-way between that of a craft pupil and that of a secondary school pupil in forms 1 to 4, but it is hoped that it will be brought nearer the level of secondary pupils. In the case of technical college pupils, only 200 out of a full-time equivalent of 825 were boarders, with a food allowance of £5.5 per month, i.e., £50 for the nine months of the year, which is considerably more than the food allowance in secondary forms 5 and 6. The pupils are treated more like Civil Service trainees than school pupils.

The future costs will obviously be affected by the content and form of technical education; the relative expansion of the technical college, the technical schools and craft enrolment, and the extent to which engineering crafts will replace the more

TABLE 21. Recurrent cost per pupil in technical education in 1964/65 (£ per annum)

Costs	Craft pupil	Secondary technical pupil	Technical college student
Local costs:			
Personal emoluments	59		55
Equipment	27		17
Other	16		24
Total tuition	102		96
Boarding	29		57
Total local costs	131	102	153
Aid costs:			
Overseas addition	26	17	16
'Aid personnel'	15	(?)	49
Total aid costs	41	17	65
Total costs	172	119	218

SOURCE: Ministry of Education

NOTES

The cost of a secondary technical pupil cannot be broken down, because it is derived as a residual, and not as the sum of its components.

Enrolment for the two calendar years is averaged, so as to correspond with expenditure data for the financial year.

Evening class students attending the technical college were converted into 'full-time student equivalents' on the

assumption that they are taught for five hours a week compared with thirty hours for a full-time student.

The estimates of expenditure on salaries are only approximate, being based on staffing and salaries in December 1964 and in January 1965.

1. Tobias report (see our bibliography).

traditional crafts. The projection of recurrent expenditure over the plan period was largely a matter of guess-work, because no policy had been formulated for technical education. Although no enrolment targets were specified, the projection envisaged a considerable expansion of enrolment at the technical college and some increase in craft enrolment. The first working papers for the plan put the total recurrent expenditure for the 1964/65 to 1968/69 period at £2.23 million, a figure subsequently reduced to £1.80 million by curbing the expansion of enrolment at the technical college and by transferring secondary technical education to the vote for secondary education. These estimates are unreliable, but even a substantial revision would make little difference to the plan, since technical education accounts for only a small proportion of the education budget.

Capital costs and utilization

The capital cost of a technical pupil is likely to be higher than that of a secondary pupil owing to the need for expensive equipment in his training. Only limited data are available in this respect. In 1962, the Unesco Planning Mission estimated the cost per place at the Moshi trade school at £420 against £280 per boarding pupil in forms 1 to 4 of secondary schools. The capital expenditure for technical education over the plan period was put at £1.5 million, on the basis not of cost per pupil, but of *ad hoc* estimates of the cost of extensions and improvements at existing institutions.

But is the fullest use being made of the existing stock? In this connexion, some data are available for the technical college. In 1965 this had 1,670 evening-class pupils, averaging five hours per week, which means that 30 per cent of the teaching at the college took place in the evenings. The college has a thirty-nine-week year but, unlike secondary schools, it is completely closed for only one week in the year.

As shown in Table 22, class-rooms and laboratories are well utilized, but it should not be impossible to make even greater use of them. Each workshop is used on an average for only twenty hours a week, the extremes being seven to eight hours for auto-electrical and motor vehicle shops and thirty-one hours for electrical

TABLE 22. Utilization of plant at the Dar es Salaam Technical College (first term 1964)

	Number	Hours per week			Per room
		Day	Evening	Total	
Class-rooms	21	544	190	734	35.0
Laboratories	2	47	20	67	33.5
Workshops	10	150	54	204	20.4

SOURCE: Ministry of Education

workshops. Though some excess capacity should be allowed for future expansion, there is need for more careful planning in the provision of workshop facilities. The technical school at Moshi is closed for eleven weeks each year and had only 484 pupils in June 1965, as against a capacity of 600. The Ministry recognizes this under-utilization and is trying to remedy it by introducing evening classes for local pupils. A more far-reaching innovation, suggested by the Ministry of Labour, is the introduction of six-week sandwich courses at Moshi for apprentices undergoing training on the job. If this scheme were operated, the facilities at Moshi could be used for forty-seven weeks a year, instead of the forty-one weeks at present.

Formal training versus on-the-job training

The trade schools were initially established to fill a real need: Tanzania had neither the enterprises nor the skilled workers who could train workers on the job, and, in any case, firms lack incentive to train African workers. The Government therefore assumed responsibility by introducing formal training. The system which has emerged consists of three years of formal education at Moshi or Ifunda, followed by two years of indentured apprenticeship with an employer. It has been criticized on the grounds that the courses are based on outdated syllabi and that, as a result, trade-school leavers need almost as much training as a worker who had never been at a trade school. There is also evidence that trade-school leavers tend to identify themselves with the educated *élite*, expect to get supervisory jobs and are unable to adjust themselves to the jobs for which they are effectively qualified. Boys enrolling at trade schools are often those who have failed to gain secondary school places and, as selection is unrelated either to inclination or to aptitude, the drop-out rate is high. The number of pupils in the different crafts is not related to the demand, and there has been an over-production of some craftsmen, such as carpenters and plumbers, and an under-production of others, such as fitters, turners and mechanics. In fact, a good deal of the expenditure on trade schools has been wasted, and it is the employers themselves who have produced the greater part of their skilled labour.

It is for these reasons that the Tobias report of 1963 proposed that the trade schools be transformed into secondary schools with a technical bias, and that skilled workers be produced by on-the-job training.¹ The same recommendations were made in the Thomas report of 1964.² The present transformation of Ifunda into a secondary school is in line with these recommendations. The future of the Moshi school is under review at the time of writing.

1. Tobias report, op. cit., p. 53.

2. Thomas report, op. cit., pp. 15-16.

However, the Ministry of Education is still in favour of formal training and argues that the present defects will be eliminated; syllabi have been revised, pupil selection has been improved, and training has been transferred from crafts in excess supply to those in short supply. The question of formal versus non-formal training deserves further consideration. Although finance is unlikely to be a crucial factor in reaching a decision, it is interesting to compare the costs of the two alternatives. Such a comparison was made by the Ministry of Labour on the basis of a number of hypothetical assumptions. The two alternatives considered were: (a) a four-year period of training on the job, interspersed with four six-week sandwich courses at a technical school, and (b) a three-year course of formal education at a technical school, followed by two years of apprenticeship with an employer.

It was found that non-formal training on the job was less costly, in terms of economic resources, than formal training. Whereas the existing system absorbs local resources valued at roughly £650 over five years, in turning out a skilled worker, the proposed system might cost the economy about £620 over four years.

In the proposed system of non-formal training on the job, the cost of training is to be met by employers of skilled labour. It has been calculated that a levy on employers of 0.5 per cent of the monthly wage earned by skilled workers would fully pay for a scheme with 400 apprentices. The levy would be paid into a fund and distributed among the firms selected to carry out training and the ministries incurring expenditures under the scheme.

If the Government relies on firms to take the initiative in providing in-service training to meet the needs of the economy, provision is liable to be inadequate: whereas the economy benefits from a worker's training throughout his working life, the firm which trained him may benefit only so long as he chooses to remain in its employment. This is why training firms should be subsidized. Under the proposed system, the relatively few firms large and progressive enough to run an efficient training scheme will train a number of workers in excess of their own requirements, receiving in exchange a sum which covers the wage cost of their trainees and, in fact, exceeds the cost of training.

5 Teacher training

Teacher training in Tanzania is undergoing a process of rapid organizational change. This means that any description of the economics of teacher training in the latest year for which comprehensive data are available, i.e., 1963, will be largely irrelevant for the future. Teacher training provides an opportunity to study the problems of planning for qualitative change.

In 1962, there were twenty-two teacher-training colleges, of which three were managed by the Government, eighteen were grant-aided voluntary agency colleges, and one was non-aided. There were three types of course, each lasting two years: one for leavers from form 4, one for leavers from form 2 of secondary school, and one for leavers from standard 8 of primary school; producing respectively grade A, B and C teachers. No less than 80 per cent of students were grade C trainees.

Many changes have been introduced or planned since 1962. In 1963, grade B was made a promotion grade only and no new enrolments for it were permitted. According to the plan, the number of colleges is to be reduced to eleven, each with an enrolment of 240 to 480 pupils, the object being to achieve economies of scale, and also to make the full use of specialized staff and equipment. Moreover, between 1964 and 1968, the number of students entering grade A courses will rise from 310 to 1,500, while the number entering grade C courses will be reduced from 860 to nil. The training of graduates from form 6 of secondary school for the post of Education Officer, grade III was begun in 1964 and will be expanded.

Recurrent revenue and expenditure

The financing of teacher training is similar to that of secondary education. All teachers are paid by the Government, while the other items are covered by grants-in-aid in the case of voluntary agency colleges and by budget allocations in the case of government colleges. The grants to the voluntary agencies are said to be the

TABLE 23. Recurrent expenditure on teacher training in 1963

Expenditures	£ thousand	Percentage	
		Including training allowances	Excluding training allowances
Personal emoluments :			
Local	189.0	47.3	54.6
Overseas addition	19.7	4.9	5.7
Gratuities	6.2	1.5	1.8
Total	214.9	53.7	62.1
School equipment and material	16.0	4.0	4.6
Maintenance of boarders	53.5	13.4	15.4
Training allowances	54.0	13.5	
Other	61.6	15.4	17.9
Total	400.0	100.0	100.0

NOTE

The table includes the expenditure on the practising schools which cannot easily be separated from that on the training colleges

SOURCES

Ministry of Education, *Annual report, 1963*
Tanganyika staff list, 1963

yardstick for the allocations to government colleges, the policy being one of equal treatment for all colleges. In 1963, the Government contributed 93 per cent of the funds and the voluntary agencies 7 per cent, but government colleges spent only 36 per cent and voluntary agencies 64 per cent of the total, which amounted to some £374,000, or £400,000 including overseas addition and gratuities. There is no revenue from fees: teacher training has been free for some years and students in fact receive allowances.

Table 23 shows recurrent expenditures by type in 1963. The main reason for the relatively low percentage of personal emoluments in the total is the relatively high percentage of training allowances, which include the payments to students, the salaries of voluntary agency teachers for in-service courses, and the salaries of teachers training abroad.

The projection of recurrent expenditure

Since the total local recurrent expenditure was £374,000, and the total number of students for grades A, B and C was 1940, the average cost per pupil amounted to some £190 per annum in 1963. However, this figure is of little use for planning purposes owing to the present policy of eliminating grade B training courses and of gradually replacing grade C courses by grade A courses. It is, therefore, necessary to cost grade A and grade C courses separately, and also to cost the new Education Officer, grade III course, which is even more expensive than the grade A course.

TABLE 24. Recurrent cost per student at teacher-training colleges in 1965 (in £)

Costs	Courses		
	Grade C	Grade A	Education Officer, grade III
Local costs			
Local salary cost	60	94	94 +
Tuition grants			
Equipment grant	5	15	25
Administration grant	5	5	5
Total	10	20	30
Living expenses			
Boarding grant	24	24	24
Training allowance	15	27	39
Teaching practice allowance	11	19	27
Total	50	70	90
Travel cost	14	14	14
Total non-salary cost	74	104	134
Total local cost	134	198	228 +
Aid costs	10	10	10
Total costs	144	208	238 +

SOURCE: Ministry of Education

NOTES:

Aid cost is taken to be the average 'overseas addition' per student in 1963

Travel cost is calculated as the average transport cost of staff and students in 1963

The salary bill (including an allowance for expatriate leave) at the Morogoro college and at four relatively well-staffed grade C colleges was calculated for a six-month period in 1965 and doubled to yield an annual figure

It is easy to separate the non-salary recurrent cost per student for the three courses, since funds are allocated for these purposes on the basis of grants and allowances per student. The figures are shown in Table 24. It is doubtful whether the boarding cost is really only £24 per student in view of the fact that the average boarding expenditure at the technical college is £57, even though the students are present at the colleges for an average (in 1965) of thirty weeks only. The difference between the cost of a grade A and a grade C student is made up as follows: £30 for salaries, £10 for tuition, and £20 for living expenses.

Expenditures on salaries for the different courses is not easy to calculate, since most colleges teach more than one course. However, there is one large college, at Morogoro, which is now almost entirely a grade A college, and there are a number of small exclusively grade C colleges. The average salary costs for grade A and grade C students were calculated on the basis of costs in these colleges; that of an Education Officer, grade III student will exceed the grade A figure, but cannot yet be established with any precision.

A problem which arises in the staffing of secondary schools is the balance between graduate and non-graduate teachers. Here, financial factors and manpower needs

have to be set against purely educational considerations. The training of an Education Officer, grade III (HSC plus two years of teacher training) costs the Government between £228 and £300 per annum, i.e., £456-£600 for the two years of training; but the training of a graduate teacher (HSC plus three years at the university) costs the Government about £3,435 for the three years at the university. However, the marginal cost of a university student (i.e., the expenditure attributable to an additional student) is only about half the annual average cost, i.e., £575 instead of £1,145, so that the marginal cost of producing a graduate teacher would amount to only £1,725.¹

Teacher training is in a state of transition, so that the present average costs will not apply in the future. On the one hand, the current staffing of the colleges is qualitatively inadequate, and an improvement will make for higher costs. On the other hand, the colleges will be reduced in number and increased in size so as to benefit from economies of scale. The working papers for the plan were based on unit costs considerably higher than those given in Table 24: £150, £240 and £300 for grade C, grade A and Education Officer, grade III students respectively, as against £134, £198 and £228+ respectively in the table. In the case of grade A students, the difference of £42 is due to the higher salary costs of a better qualified staff (£16), to higher living expenses (£13) and to better upkeep and materials (£13). The working papers assumed an increase in unit costs of 3 per cent per annum owing to incremental creep; this would imply that the rapid expansion of staff will be achieved by recruiting experienced teachers on pensionable terms.

The initial projection for the five years of the plan gave a total of £3.86 million, which was subsequently reduced to £3.22 million after the proposed expansion of primary education had been cut and a proposal to train the untrained staff who teach outside the public school system had been turned down.²

Capital costs and utilization

Since no further grade B or C colleges are to be built, the unit capital cost of grade A colleges only is of interest. Three new colleges are to be built and eight others expanded during the plan period. The basic planning unit is one of 240 students. Its cost was estimated in 1963 and is shown, together with the implied cost per place of £800, in Table 25.

The total capital expenditure during the plan period is put at £2.0 million, of which £1.76 million represents 2,200 places at £800 per place, and the remainder the cost of improvements of existing facilities. Part of this expenditure is to be financed by foreign governments, and part by the voluntary agencies.

1. In this connexion, see Chapter 6.

2. A.C. Mwingira; Simon Pratt, *op. cit.*

TABLE 25. Capital cost of a grade A college of 240 students in 1963

Cost	Per college	Per student
	(£ thousand)	(£)
Teaching and administration	70	292
Student residences	50	208
Staff housing	72	300
Total	192	800

SOURCE: Ministry of Education

As far as the utilization of capital is concerned, the average length of term of the twenty colleges (excluding Morogoro, which had an exceptionally long period of teaching practice) in 1965 was only thirty-six weeks, including an average of six weeks during which trainees left the college and taught in schools under the supervision of their teachers. Most buildings were, therefore, in use for only thirty weeks of the year, though the staff taught for an average of thirty-six weeks. Clearly, there is a need to make greater use of both buildings and staff.

It is not possible to reduce the total training period of seventy-two weeks to less than two school years, because the beginning and end of the course must coincide with the end and beginning of the general school year—unless, for example, prospective and newly trained teachers were seconded to adult education for a period of six months. But it is possible to make use of buildings and staff during vacations, and, indeed, a start was made in 1963. When, in 1961, a one-year course was introduced for upgrading teachers from grade C to grade B, it soon became apparent that the unit cost of this course was too high; so the course was ended in 1963 and replaced by a correspondence course plus a vacation course at the training colleges. The course lasts two years and involves six weeks each year at selected training colleges. Buildings at those colleges are then used for thirty-six weeks and staff for forty-two weeks per year. In 1965, there were 350 upgrading students attending courses at seven colleges. The capital and salary expenditure was nil, the only additional expenditure involved being due to boarding and non-salary tuition costs. If these items cost as much as for a grade A student, the unit cost for a six-week course is £20. However, upgrading results in higher salaries, and this is the factor determining the amount of upgrading to be done, and thus the number of colleges to be used for that purpose. But it should be possible to make better use of the staff of other colleges, for instance, in such tasks as revising syllabi and adapting textbooks.

6 Higher education

Higher education in East Africa is the responsibility of the University of East Africa (UEA), comprising Makerere College in Uganda, the University College of Nairobi, in Kenya, and the University College of Dar es Salaam, in Tanzania. The UEA was formed in 1963, but Makerere was elevated to university status in 1953, Nairobi in 1961 and Dar es Salaam took its first students in 1961. The college opened with only a law faculty, and added the faculty of arts and social science in 1964, and the science faculty in 1965. It should be mentioned here that the UEA makes a distinction between so-called professional faculties—law, medicine, agriculture, veterinary science, engineering, architecture, and surveying—and basic faculties—science, arts, social science, and education.

In East Africa, an inter-territorial university possesses important advantages over three separate small universities, which are the only politically feasible alternative: it can achieve economies of scale by sharing professional faculties among its three colleges, and it is in a better position than a small university to attract foreign aid. Dar es Salaam, being the late-comer, has only one professional faculty, the law faculty, but Makerere has agriculture and medicine, and Nairobi engineering, surveying, veterinary science and architecture.

The policy laid down in the University Development Plan (UDP) for the triennium 1964/65 to 1966/67¹ is to approach and eventually achieve parity among the three colleges in the number of staff and students in their basic faculties. However the professional faculties are not to be duplicated. It is the former provision which, together with the receding prospects of political union in East Africa, threatens the continued existence of the federal university. Thus funds for the expansion of Makerere will be virtually frozen until the other two colleges have caught up; as a result, Makerere may decide to break away.

So far, the Government has given all those who qualify for entry the necessary

1. *Draft University Development Plan for the Triennium 1964/65-1966/67* (see our bibliography).

financial support to study at the university. This may cease to be its policy, however, when the supply of graduates exceeds the manpower requirements. Enrolment in the professional faculties is limited to the estimated requirements in each profession. Tanzanian-sponsored students entering the basic faculties are not formally obliged to enrol at University College, Dar es Salaam but in practice they are required to do so. Where professional training is not provided at the UEA to meet manpower requirements, students are sent abroad, if necessary at government expense. This is the case for the highly specialized courses in dentistry, forestry and mining engineering, for which potential economies of scale could not be achieved at the UEA.

The cost analysis will be concerned with the UEA in general, and not simply the University College, Dar es Salaam. In any case, Dar es Salaam is only in the initial stages of its development, and it would not be possible to infer much from the present situation. The analysis which follows will also be concerned, to a much greater extent than that for other levels of education, with economies of scale, both actual and potential, which can be very important in the case of higher education.

Recurrent revenue and expenditure

The data available for recurrent revenue and expenditure are almost entirely limited to those contained in the UDP mentioned above. Recurrent expenditure over the triennium was planned on the following assumptions. Average salaries and the distribution of staff between grades were based on the actual situation at Makerere and Nairobi in 1962/63. The increase in the number of teachers in the basic faculties was planned on the basis of staffing at Makerere in 1962/63, and the undergraduate/staff ratio was applied to estimates of future enrolments. The staffing of professional faculties was planned on an *ad hoc* basis. These projections, after slight downward revision, were accepted by the University Grants Committee (UGC) and are shown in Table 26. All other recurrent expenditure, excluding minor items and students' residential expenditure, was projected on the basis of its relation to salaries in 1962/63 (42 per cent). But this method was subsequently found inadequate, because the calculations were based on estimates and not on actual expenditure, and the accounts of the three colleges were not comparable. It is clear, then, that the standards planned for the UEA as a whole over this period are those which have existed at Makerere.

Although the undergraduate/staff ratios are planned to rise, they are nowhere near the ratio of 15:1 recommended by the Tananarive Conference.¹ One reason

1. *The Development of Higher Education in Africa*, Paris, Unesco, 1963, p. 28.

TABLE 26. Student/staff ratios at the University of East Africa

	Planned enrolment of undergraduates			Revised enrolment of all students		
	1964/65	1965/66	1966/67	1964/65	1965/66	1966/67
Students						
Dar es Salaam	210	375	505	210	504	872
Makerere	794	854	894	1,127	1,354	1,572
Nairobi	615	766	915	615	979	1,289
UEA	1 619	1 995	2 314	1 952	2 837	3 733
Staff						
Dar es Salaam	40	64	80	40	64	80
Makerere	138	144	149	138	144	149
Nairobi	120	127	134	120	127	134
UEA	298	335	363	298	335	363
Student/staff ratios						
Dar es Salaam	5.3	5.9	6.3	5.3	7.9	10.9
Makerere	5.8	5.9	6.0	8.2	9.4	10.6
Nairobi	5.1	6.0	6.8	5.1	7.7	9.6
UEA	5.4	6.0	6.4	6.6	8.5	10.3

SOURCE

Planned enrolments of undergraduates and planned staff : UGC Report, 1964 ; Revised enrolment of all students : latest UEA estimate, December 1964

for this low ratio is that courses being run for the first time, as at Dar es Salaam, require much more planning and preparation than do well-established courses. But the main reason is the small number of students in relation to the wide range of the courses. The UEA Economy Commission argued that an established department cannot have less than three staff members, and a new department needs at least two.¹ It proposed that each staff member should have nine 'contact hours' a week with students, and that each student should attend about twelve lectures and one tutorial in a group of five each week.

In the arts and social science departments, these assumptions and objectives imply an expansion of staff as shown in Table 27. Thus the colleges should be able to raise their student/staff ratio as enrolment in each department increases. It is surprising that Makerere, which is the largest college, does not show a significantly higher ratio than the other two. This fact is partly due to its expensive professional faculties; but it also suggests that economies of scale will not be achieved unless the range of specialization within departments is restricted.

There are two reasons why the undergraduate/staff ratios quoted above may be misleading. The figures of enrolment refer to undergraduates and not students, who, in addition to undergraduates, include post-graduates, diploma students and

1. *Report of the Economy Commission*, University of East Africa, 1963. (Unpublished.)

TABLE 27. Economies of scale in university departments: arts and social science faculty

Students	Size of department (staff)	Required student/staff ratio
0-30	3	1.0-10.0
30-50	4	7.5-12.5
50-65	5	10.0-13.0
65-80	6	10.8-13.3
80-105	7	11.4-15.0

NOTE

Since students spend only part of their time in any one department, the number of students is measured in 'full-time student equivalents'

SOURCE

The table is taken from an unpublished circular elaborating the proposal of the Economy Commission. It was issued as a guide by the Central Organization of the UEA

some following a one-year course prior to the undergraduate course. Secondly, the expansion of enrolment is now considerably exceeding the rate planned by the UGC. Thus, if the academic staff is not increased correspondingly, the actual ratio will exceed the planned figure. As can be seen from Table 26, the student/staff ratios will rise rapidly during the triennium, especially at Dar es Salaam and Nairobi. However, if the undergraduate/staff ratios are misleadingly low there is reason to believe that the student/staff ratios in the tables are misleadingly high. For instance, the policy now being pursued is apparently to meet the expansion of enrolment in excess of the UGC figure with as many additions to staff as can be financed by additional tuition fees. With tuition fees at £300 per annum, average staff salary of about £2,600, and marginal non-salary expenditure per student ranging from zero to £130 (the latter being a recent Makerere estimate), the marginal student/staff ratio ranges from 9:1 to 15:1.

Of course, the 15:1 ratio recommended by the Tananarive Conference is no more than a guide-line for policy, to be adjusted in the light of local circumstances. Moreover, it apparently refers to a four-year degree course, whereas the courses at the UEA last for three years only. If UEA students had a period of 'direct contact' with staff equal to that of a four-year course, the corresponding student/staff ratio would be less than 12:1.

The sources of recurrent revenue, as planned by the UGC, are shown in Table 28. Each college receives some direct revenue from property and from specific grants, both foreign and local. However, the bulk of the recurrent revenue comes from the three Governments in East Africa. Each Government pays a tuition fee of £300 per sponsored student, as well as a capitation grant on behalf of its nationals, while the East African Common Services Organization (EACSO) makes a lump-sum contribution. There is an important difference between fees and capitation grants: the revenue from the former rises automatically as enrolment expands above that planned by the UGC, whereas the revenue from the latter is subject to negotiation between the three Governments. According to the UGC estimate, the capitation

TABLE 28. Planned sources of recurrent revenue for the University of East Africa, 1964/65-1966/67

Source	Dar es Salaam	Makerere	Nairobi	Central Organization	Total	UEA
	(In £ thousand)					%
Governments:						
Tuition fees	309	721	652	—	1 628	27
Capitation grants	350	850	755	94	2 049	33
EACSO	256	815	415	200	1 686	27
Total	915	2 386	1 822	294	5 417	87
Grants	150	40	207	76	473	8
Other fees	21	48	45	—	114	2
Direct revenue	17	139	43	—	199	3
Total revenue	1 103	2 613	2 117	370	6 203	100

SOURCE: University of East Africa, Report of the University Grants Committee, 1964

NOTES

The University College at Dar es Salaam is expected to receive a contribution of £60,000 from the Tanganyika Higher Education Trust Fund. This is a fund established by local initiative before independence to promote the higher education of Tanzanians.

Total recurrent expenditure less direct revenues from property, grants and fees yields the 'net recurrent requirement', met in the following way: a total contribution to be made by EACSO was decided, and the residual—financed by the three Governments as a capitation grant—is allocated to the colleges in proportion to the number of sponsored students at each college. The EACSO contribution is then allocated to meet each college's remaining deficit.

grant per student will fall from £400 in 1964/65 to £280 in 1966/67, and even further if enrolment expands faster than the planned figure. With the tuition fee at £300, nine additional students cover the cost of an additional staff member, and, in fact, the colleges are now matching the current enrolment in excess of the planned numbers with additional staff only to the extent that the latter can be financed from additional tuition fees.

It may be noted that the system of financing the UEA fails to take into account differences in cost per student as between faculties. The real cost of a medical student far exceeds that of an arts student, but the sponsoring Government pays the same amount for both. Thus cross-subsidization takes place between faculties. Moreover, such an arrangement tends to produce decisions which are not based on economic costs; it may also result in cross-subsidization between Governments.

There are several ways in which unit cost at the UEA can be expressed, and Table 29 gives four of them: (1) cost per undergraduate as planned by the UGC; (2) cost per student as planned—implicitly—by the UGC; (3) cost per student on the basis of actual enrolment and expenditure, assuming that the latter exceeds planned expenditure by £300 for each unplanned student; (4) cost per undergraduate if an undergraduate/staff ratio of 15:1 could be achieved by 1966/67.

The table shows that unit cost, whether per undergraduate or per student, is remarkably high in comparison with other levels of education in Tanzania, and will remain high if expansion over the triennium takes place as planned. However,

TABLE 29. Unit recurrent costs at the University of East Africa (in £)

	(1) Planned cost per under- graduate		(2) Planned cost per student		(3) Actual cost per student		(4) 'Target' cost per under- graduate
	1964/65	1966/67	1964/65	1966/67	1964/65	1966/67	1966/67
Dar es Salaam	1 262	925	1 262	754	1 262	623	679
Makerere	1 067	1 001	787	753	766	642	717
Nairobi	1 086	812	905	712	1 086	634	581
Total UEA	1 099	910	879	725	930	635	658

SOURCES

Col. 1. Report of the University Grants Committee, 1964

Col. 2. UGC report, on expenditure. The UGC report did not provide data on students as opposed to undergraduates. 'Planned enrolment of students' is obtained by adding to the undergraduate numbers planned by the UGC the latest estimates of non-degree students.

Col. 3. Expenditure is taken as expenditure planned by the UGC plus £300 per student in excess of 'planned student numbers' explained above. Enrolment of students is taken from the latest estimates issued by the UEA, in December 1964.

Col. 4. 'Target' cost per undergraduate is calculated on the basis of an undergraduate/staff ratio of 15:1. The calculation is performed by making a proportionate correction to the salary bill projected in the UDP of 1963.

the latest estimates of actual cost per student in 1966/67 show important reductions, especially at Dar es Salaam, where cost will be halved. These estimates are based on the assumption that Governments will not be required to make any contribution other than that planned by the UGC, but it remains to be seen whether this will be the case. The achievement of an undergraduate/staff ratio of 15:1 would have a considerable impact on unit costs, as is shown in the table.

It would be interesting to know the differences in cost between different faculties and departments, but no data on this subject are available in any of the published reports on the UEA. However, it has been suggested that the cost of an arts student may be half that of a science student and a third that of a medical or agricultural student; if so, any 'average cost per student' in general would be misleading for both financial planning and decision-making purposes.

The costs quoted above are merely the tuition costs incurred by the university. They exclude the living expenses of students, amounting to £200 per student in 1965/66. They also exclude travel costs paid by the Tanzanian Government which amounted on an average to £75 per student in 1963/64, but which are likely to fall as more Tanzanian students enrol at Dar es Salaam. Thus, in order to estimate the total value of resources devoted to higher education, we should add some £275 per student per annum to the unit recurrent tuition costs of Table 29.

Any resident of Tanzania can obtain the remission of at least the capitation fee by agreeing to serve the Government for not less than five years after graduation. In fact, the vast majority of Tanzanian students are fully supported by the Government, which spends on behalf of a student some £900 per annum. Even a 'private' student is partly subsidized, since he pays a tuition fee of only £100 per annum,

though he must pay the capitation fee and all other fees and expenses. In fact, though partly subsidized, he may contribute more revenue to the university than the additional expenditure incurred through his enrolment. If the EACSO contribution is included as a cost to the Government, the total cost per student comes to £1,145 (see Table 30), and a three-year course thus costs the Government something like £3,435 per student.

As average income per head in Tanzania is £24 per annum, it is hardly surprising that the university authorities are looking for potential economies. The university Development Plan had initially been drawn up on the basis of the high standards set by Makerere, but the Economy Commission recommended a cut of 8 per cent in staff and salaries planned for 1966/67, by calculating staff requirements on the basis of nine 'contact hours' per teacher per week. This seems to be a low figure for a thirty-week academic year; but it corresponds to standards in developed countries, and as long as there is competition for staff recruited from abroad, teaching loads cannot be raised much above those offered by competing employers. Nevertheless, what can be afforded by a developed country may be inappropriate to the priorities of a poor one.

It is sometimes argued that low teaching loads at universities are justified by the research activities of the staff, and that cost per student should be calculated to exclude staff time spent on research. However, from an economic point of view, this interpretation of unit cost would be justified only if the Government were prepared to finance such research activity. This is more likely to be the case if research projects are chosen for their relevance to the country's needs, and co-operation with the Government is encouraged.

The principal means of cutting unit costs is through economies of scale consequent upon higher enrolments. Students should be prevented from going abroad if the cost to the Government is greater than the marginal cost of a student in East Africa; this is now the policy in Tanzania. Departments should not be allowed

TABLE 30. Cost to the Tanzanian Government of a student at the University of East Africa, 1965/66

£ per annum		£ per annum	
		<i>Brought forward</i>	795
Tuition fee	300	General expenses	16
Capitation grant	331	Clothing and bedding	20
Residence fee	125	Travel expenses	75
Misc. fees and subscriptions	39	EACSO contribution	239
	795		1 145

NOTE

Cost is calculated on the basis of the enrolments and expenditure planned for 1965/66 by the UGC, and the student charges at the University College Dar es Salaam.

SOURCE

Ministry of Education

to proliferate; the range of specializations within departments should be restricted and a selected number of relevant departments—relevant, that is, to the country's needs—should be expanded. The UGC got to the heart of the matter when it stated that 'It is better to do few things well than more things less well. We believe that some of the developments proposed could with advantage be deferred to ensure the full development of the central priorities. It may be better policy, on academic as well as financial grounds, to secure training overseas in some disciplines until the colleges are ready to establish the necessary staff and facilities in East Africa. We believe, moreover, that there are some activities that could and should be discontinued.'¹

It is in these respects that a break-up of the university could have its most harmful effects. No doubt, it would be possible, in the case of such a break-up, to share faculties between the three countries; but it is more likely that, owing to political pressures, each country would want to be academically independent. An indication of this was given in a recent statement of the Minister of Health expressing a hope to convert the Dar es Salaam School of Medicine into a full medical faculty.

Study abroad is now severely controlled, and, where courses are available at the UEA, no student will now receive government assistance for study abroad. All offers of foreign assistance must now be channelled through the Tanzanian Government. In 1963/64, when Dar es Salaam had only the law faculty, 284 Tanzanian students at the UEA were fully supported by the Government, and only eighty-three abroad; in addition, ninety-four students abroad were partly financed. There were also some 1,600 Tanzanian students abroad financed entirely from foreign or private sources. Although no precise figures are available for the cost to the Government of supporting students overseas, there are indications that the payments to students in the United Kingdom range between £500 and £800 per student per annum, which is considerably less than the average cost of a fully supported student at the UEA, now £1,145 per annum. However, as the present policy of the colleges is to adjust their marginal cost (i.e., the cost of an additional student) to equal the tuition fee of £300 per annum, at least in the basic faculties, the marginal cost of a student to the Tanzanian Government (including living expenses) is only about £575 per annum.

Average cost should govern the initial decision on whether to establish a faculty. But once a faculty has been established, marginal cost becomes relevant in decision-making. The economic criterion for sending a student abroad is that the cost to the Government of doing so is less than the additional cost which it would incur if the student enrolled at the UEA. However, there are other criteria, such as the relative academic standards of courses at home and abroad, their relevance to the needs of

1. *Report of the University Grants Committee, University of East Africa, 1964, p. 7.*

the country, and the policy of non-alignment. The economic criterion itself might produce a different answer if would-be foreign donors could be persuaded to give support for staff at the UEA instead of scholarships to students. If such aid is in the form of support for any national of the donor country, it need not conflict with the university's autonomy in appointing its staff. A move in this direction came when certain foreign Governments recently accepted responsibility for the overseas addition to the salaries of their nationals, in the case of newly appointed staff.

The projection of recurrent expenditure

The working papers for the plan based the projection of recurrent expenditure on higher education on the following assumptions. The cost per student to the Government was put at £1,200 per annum in 1964, falling to £1,000 in 1968. The number of students at the UEA was to rise from 435 in 1964 to 1,500 in 1968. The cost of study abroad was put at £850, and the number studying abroad who are financed by the Government was to fall from 100 in 1964 to nil in 1968. Total recurrent expenditure for the plan period was put at £5.35 million. Government expenditure was subsequently reduced to £4.42 million by subtracting the planned contribution from EACSO, and by assuming that additional students would be sent abroad after 1967 if the cost per student at the UEA could not be reduced below £850 by that date. In the light of our estimates, the unit costs used by the Ministry are probably too high, but its enrolment projections are probably underestimates. In any case, plans for higher education in Tanzania can be only very tentative, involving as they do a fairly autonomous university of uncertain future, composed of three separate colleges, and financed by three independent Governments.

Capital revenue and expenditure

The Tanzanian Government is responsible for the construction of the University College of Dar es Salaam, and is not concerned with UEA capital expenditure elsewhere. Consequently, the analysis is confined to this college. It is being built on a virgin site a few miles from the city, and the work, started in 1961, is still proceeding. The buildings would be impressive in any country; here, they contrast starkly with the primitive huts nearby. In the first years, there was naturally a good deal of excess capacity, but by 1967 this should be small enough to make possible the calculation of a cost per place.

The two capital programmes cover the trienniums 1961/62 to 1963/64 and 1964/65 to 1966/67, and a total expenditure of £3,766,000 on undergraduate

facilities has been planned and partly carried out for this six-year period. As the buildings will accommodate 860 students, the average capital cost per place is £4,400. But this average cost will fall as facilities are expanded to take more students, since the marginal cost of a student place is lower than the average cost. In 1967, the marginal cost may vary between £3,800 and £2,500 per place, according to whether or not the number of faculties and departments is increased. The cost of a staff house is £7,200, and the residential cost per student place (excluding eating facilities) is £720, the students being accommodated either in single rooms (90-115 square feet) or in double rooms (165 square feet) on the assumption that they study in their rooms. It would be interesting to cost the alternative policy of doubling the number of students per room while providing adequate library facilities for study.

The Ministry of Education projected capital expenditure on higher education over the planning period by costing the planned expansion of enrolment in Dar es Salaam, i.e., 1,210 students, at £4,000 per place. On instructions, no account was taken of a possible rise in building costs; the building programme of the first triennium would have cost some 50 per cent more during the second.²

The sources of capital revenue for the building programme are shown in Table 31. Of all the capital projects in Tanzania, the construction of the University College is the one easiest to finance; as foreign donors and lenders require little persuasion to finance prestige projects. In the first triennium, foreign sources provided 73 per cent, and in the second, 75 per cent of total expenditure, most of it in the form of grants and the remainder in the form of easy loans from foreign Governments.

TABLE 31. Sources of capital revenue, University College, Dar es Salaam

Source	1961/62-1963/64	1964/65-1966/67
	(£ thousand)	
Grants		
United Kingdom Government	376	567
International organizations	—	35
Foreign private	334	309
Local private	108	256
Tanzanian Government	248	349
Total grants	1 066	1 516
Loans		
United Kingdom Government	—	420
United States Government	272	465
Total loans	272	885
Total revenue	1 338	2 401

NOTE: The Institute of Public Administration is excluded

SOURCE: University College, Dar es Salaam

7 A comparative analysis

The various categories of education have been examined separately; but this approach corresponds to only part of the educational planning process in Tanzania. The different categories of education are also planned in relation to each other, so as to secure the best allocation of resources between categories. Thus a comparative analysis will give further insight into the process of planning by showing how resources are allocated, and also by questioning whether or to what extent the difference in unit cost between the various levels and types of education are justified.

Recurrent expenditure

The differences in the unit costs of different levels or types of education can be enormous. To take the extreme example, the cost per pupil in standards I and II of primary school is £3.7 per annum, but the cost per student at the UEA is £1,145 per annum. Even at the same level of education, the cost per pupil is much higher in technical education and teacher training than in general secondary education. A breakdown of unit cost (in Table 32) enables us to see why this is so and whether or to what extent these differences are necessary. For instance, are the large differences in living costs between primary schools, secondary schools, the Technical College, teacher-training colleges and the university fully justified by the argument that higher academic achievement requires higher living standards? By asking such questions, the educational planner is able to discover possibilities for economizing on resources. Comparative costs should also enter decisions on the structure of the education system, e.g., on whether the forms 5 and 6 of secondary school are preferable to an introductory year at a university.

It might have been expected that salaries would constitute a higher proportion of unit cost in primary than in post-primary education, owing to the lower cost per pupil of equipment and boarding in primary schools. In fact, salaries in 1963

TABLE 32. Recurrent cost per pupil by item of expenditure and type of education in 1963¹

	Primary standards				Secondary forms		Technical		Teacher training			Higher
	I - II	III - IV	V - VI	VII - VIII	1 - 4	5 - 6	School	College	Grade C	Grade A	Education Officer grade III	UEA
Years of education on entry	0	2	4	6	8	12	8	12	8	12	14	14
Length of course (years)	2	2	2	2	4	2	3	1-3	2	2	2	3
Enrolment	262 400	224 700	69 500	35 100	16 420	760	950	480	1 490	270	—	280
<i>Annual cost per pupil (£)</i>												
Salary :												
Local	2.7	6.3	7.3	14.8	43.5	113.6	59.2	54.7	60	94	94+	...
Overseas	—	—	—	—	6.8	16.7	41.0	64.8	10	10	10	...
Total	2.8	6.3	7.3	14.6	50.3	130.3	100.2	119.5	70	104	104+	...
Equipment	0.5	0.5	1.3	2.0	5.0	15.0	27.1	17.1	5	15	25	...
Boarding and living	—	—	15.4 ²	15.4 ²	24.0	24.0	29.2	56.8	50	70	90	160
Other	0.4	0.4	0.7	1.4	5.6	8.0	16.1	24.1	19	19	19	...
Total cost	3.7	7.2 ²	9.3	18.2	85.9	177.3	172.6	217.5	144	208	238+	1 145

NOTES

1. The data refer to 1963 except for the cost estimates in teacher training, technical and higher education, which relate to 1964 or 1965

2. The cost estimates refer to a boarding pupil³, except in the case of primary education

3. The costs in primary standards III and IV are for full-day attendance ... Data not available

accounted for the same proportion—66 per cent—of cost in both primary and secondary education, because the lower non-salary cost in primary education was compensated exactly by the lower pupil/teacher ratio and the higher average salary in secondary education.

Table 33 shows the distribution of recurrent expenditure between the different levels and types of education and its variation over time. It is interesting to note that, while the share of secondary education and of teacher training rose, that of primary education fell slightly during the period 1956-63 and that it will continue to fall during the plan period, while that of the other levels and types will continue to rise. In other words, the plan envisages a major switch of resources from primary to post-primary education.

The item 'administration and general' in Table 33 was initially projected over the plan period on the assumption that its share of total recurrent expenditure will remain at the level of 5 per cent as in 1962. It represents expenditure by the Government only and excludes that incurred by voluntary agencies and local authorities. This item comprises a strictly administrative component, which is closely related to total enrolment or total expenditure on education, and several unpredictable components, such as expenditure on libraries, or grants to various bodies.

It is not contended here that the allocation of expenditure between the different levels and types of education can be decided in terms of their relative shares. Rather, post-primary enrolment must be determined largely by manpower needs, while primary enrolment can be manipulated in accordance with the availability of financial resources. The total expenditure and the allocation of this total between the various levels and types of education cannot be treated as two separate topics: the problem is not to allocate a certain share of a given total expenditure on education to primary education, but to adjust expenditure on primary education to determine that total, having already established post-primary expenditure. Post-primary expenditure can be cut only if cost per pupil can be reduced without affecting educational standards, or if the Government is prepared to reduce the pace of Africanization.

Compared with many African countries, the planned growth rates for primary education in Tanzania reflect a remarkable measure of restraint. However, no realistic plan can be drawn up without taking account of political pressures. When demand exceeds supply, local authorities and self-appointed groups tend to build schools and hire teachers without the Ministry's approval, only to claim subventions from the Government later on. Such demands are often difficult to resist, and there is a danger that the effect will be to raise expenditure on primary education, and thus total expenditure on education, above the planned level. It may be added that the planned allocations to lower and upper primary education respectively reflect the unsatisfied demand and consequent political pressure for the expansion of upper primary schooling, which is considerably more expensive

TABLE 33. Recurrent expenditure on education by level and type of education

	1956		1961		1962		1963		Plan 1964/65-1968/69			
	£ thousand	%	£ thousand	%	£ thousand	%	£ thousand	%	Draft £ million	%	Final £ million	%
Primary	2 198.0	63.5	3 359.5	66.3	4 332.0	64.1	4 408.0	62.0	32.67	56.2	27.62	54.3
Secondary	517.0	14.9	850.5	16.8	1 215.0	18.0	1 316.5	18.5	11.00	18.9	10.00	19.7
Technical	151.0	4.4	180.0	3.6	199.5	3.0	225.0	3.2	2.23	3.8	1.80	3.5
Teacher training	116.0	3.4	174.5	3.4	289.0	4.3	374.0	5.3	3.86	6.6	3.22	6.3
Higher	230.0	6.6	269.0	5.3	384.5	5.7	392.5	5.5	5.35	9.2	5.27	10.4
Administration and general	250.0	7.2	230.5	4.6	331.5	4.9	392.5	5.5	3.07	5.3	2.95	5.8
Total	3 462.0	100.0	5 064.0	100.0	6 751.5	100.0	7 108.5	100.0	58.18	100.0	50.86	100.0

NOTES

The contribution of voluntary agencies towards expenditure was excluded in 1956 and 1961
Expenditure on 'overseas allowances' and gratuities is excluded
Expenditure on higher education financed by EACSO is included only for the plan period

SOURCES

Ministry of Education. *Annual reports* and internal files; *Five-year plan*, vol. I, p. 68
A.C. Mwingira; Simon Pratt. *Op. cit.*

than lower primary schooling. Thus, more than five children must be kept out of the four-year lower primary course to pay for every three additional children given the three-year upper primary course.

Capital expenditure

The large differences in unit costs per place for the various types of education are shown in Table 34; again, it may be asked to what extent such differences are justified. For instance, why should there be a difference of £200 in the cost per place of pupils at the same level (in grade A teacher training and forms 5 and 6 of secondary schools) and a difference of £3,600 between grade A teacher training and higher education? To what extent are the big differences in boarding accommodation necessary for academic achievement, and to what extent do they represent status? The capital cost of a place in secondary day forms 1 to 4 is £270, whereas the corresponding cost in primary standards VII and VIII is roughly £75. This wide divergence suggests that either the one cost is too high or the other too low.

The distribution of capital expenditure between the different levels and types of education is shown in Table 35. Unfortunately, it is available only for government expenditure and grants. It should be borne in mind, however, that the expenditure for any particular year does not indicate either the amount of construction going on or the number of class-rooms completed in that year; moreover, the financial

TABLE 34. Capital cost per pupil by item of expenditure and by type of education (in £)

	Secondary		Teacher training, grade A	Higher, Dar es Salaam
	Forms 1-4	Forms 5-6		
Cost of a class-room.	5 625	5 130	...	...
Cost of a teacher's house	2 500	2 500	3 000	7 170
<i>Cost per pupil</i>				
Class-room and administration	161	256	292	...
Boarding	125	150	208	720
Teachers' housing	107	188	300	...
Total	393	594	800	4 400

NOTES

... Data not available

The boarding cost per student at the University College excludes dining facilities

Capital expenditure in technical education has been estimated on the basis of *ad hoc* extensions to existing institutions.

No capital costs per pupil are available

Data on primary education are meagre, owing to the decentralized nature of capital expenditure. The cost per place estimates used (implicitly) in projecting plan expenditure (£22, £44, £58 and £100 in standards I-II, III-IV, V-VI and VII-VIII respectively) are suspect for two reasons: (a) they are much higher than our limited information on actual expenditure would suggest (see Table 13); (b) the initial estimate of primary capital expenditure was cut by 60 percent

The capital cost per place in primary standards VII and VIII, referred to in the text, was estimated at £75 on the basis of £1,500 for a class-room, £1,200 and £600 for a teacher's house, grade A and grade C respectively, one grade A and half a grade C teacher per class, and forty pupils per class

Table 35. Government capital expenditure on education by level and type of education

	Actual				Estimates				Plan 1964/65-1968/69			
	1962/63	%	1963/64	%	1964/65	%	1965/66	%	Government	%	Total	%
	(£1,000)		(£1,000)		(£1,000)		(£1,000)		(£ million)		(£ million)	
Primary	171.8	17.3	195.4	18.7	400.5	15.3	457.8	19.7	2.70	19.3	5.00	29.6
Secondary	541.8	54.6	301.9	29.0	721.0	27.6	463.5	19.9	2.65	18.9	3.25	19.2
Teacher training	71.7	7.2	73.7	7.1	500.0	19.2	352.5	15.2	2.00	14.3	2.00	11.8
Technical	7.9	0.8	18.6	1.8	116.5	4.5	137.4	5.9	1.50	10.7	1.50	8.9
Higher	200.0	20.1	452.6	43.3	810.0	31.0	765.0	32.9	4.90	35.0	4.90	29.0
Other	—	—	—	—	62.0	2.4	147.8	6.4	0.25	1.8	0.25	1.5
Total	993.2	100.0	1042.2	100.0	2 610.0	100.0	2324.0	100.0	14.00	100.0	16.90	100.0

NOTES

The category 'other' refers mainly to expenditure on libraries

Expenditure on higher education includes expenditure on extramural studies

SOURCES

Appropriation accounts (annual)

Estimates of expenditures (annual)

Five-year plan, vol. I, p. 67

estimates for the last two years do not give a true indication of actual expenditure.

More revealing are the projections over the plan period. Primary and higher education appear as the major users of capital, with almost 30 per cent of the total expenditure going to each. The main difference between total capital expenditure and government capital expenditure over the plan period is due to the important contribution made by local authorities, voluntary agencies and village communities to the construction of primary schools.

Conclusion

It might be argued that the costing of education is an unnecessary exercise because 'education is a fundamental human right, and should be provided irrespective of cost'. However, although education is a 'human right', it is still necessary to estimate the cost of providing for this particular right in terms of other 'human rights' thereby foregone, such as the 'right to health' and the 'right not to starve'. The funds spent on education represent the funds not spent on health, agricultural and other services. Educational development must be costed to discover whether it takes a disproportionate share of the country's resources. The Tanzanian Government wisely recognizes that educational expenditure should be governed by economic considerations; that the expansion of post-primary education should be determined largely by manpower needs, and that of primary education largely by financial limitations.

It is easy to point to the statistical deficiencies and the political and economic imponderables which make educational planning an exercise full of pitfalls. Nevertheless, provided there is sufficient flexibility in the planning machinery, so that estimates can be revised where necessary before the plan period is over, these considerations in no way diminish the need for planning. It is only by attempting to plan that the deficiencies of data will be remedied. It is far better to reach decisions by trying rationally to evaluate alternatives than by relying on hunches. Even if some decisions are taken on political grounds, it is important that their cost implications should be recognized. The costing of educational development as carried out in Tanzania and described in this study may be still crude and elementary; but it is a remarkable first step, and one which carries with it some useful lessons for other African countries faced with similar problems.

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Financing of education in Nigeria

A. Callaway
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Foreword

With educational systems throughout the developing world heading into a period of financial crisis, this study by Dr. Archibald Callaway and Dr. Alighiero Musone is especially timely.

This financial crisis of educational systems arises in part from the very success they have had in expanding enrolments and expenditures over the past ten years. Typically, their expenditures have risen more rapidly than the output of the economy and than over-all public expenditures. Thus, many developing countries which ten years ago were spending only 1 to 2 per cent of their gross national product on education are today spending 3, 4 or 5 per cent. And whereas they were earlier spending less than 10 per cent of their total public budget on education, many are now spending 15, 20 or even 25 per cent.

Simple arithmetic says that this rise in education's 'share' of national resources cannot go on at this rate indefinitely. The pressing demands of other important public services and investments will increasingly put a brake on further expansion of education's share. This means that sooner or later, in each country, annual increments to education budgets will be forced into line with the growth rate of the economy and of public revenues as a whole. And if the economic growth rate is disappointingly low, the constraints on education budgets will be that much more severe.

While all this happens on the revenue side, however, the financial requirements on educational systems will keep right on rising. The resulting disparity between the two is what sounds the financial crisis. The reasons why financial requirements will keep rising are all too familiar—an exploding youth population, increasing school participation rates, high drop-out and repeater rates, extra costs for improving quality. Together these factors guarantee an upward march of costs per student at every educational level.

In short, the financial crisis of educational systems in developing countries is a compound of growing constraints on revenues, inexorably growing demands for

more and better education, and the fact that education appears to be what economists call a 'rising cost industry'.

Faced with this inexorable finance and cost squeeze, educational authorities have only two possible avenues of escape and they will be well advised to pursue them both rigorously. One is to seek out new sources of revenues, from both public and private sources. The second is to spur educational innovations which will, without impairing quality, hold down unit costs, or at least keep them from rising as rapidly as otherwise.

The take-off point of such a dual strategy for coping with the financial crisis is for educational authorities to find out more than they have ever had to know before about the economic facts of life of their educational system. To see the future more clearly, they must first find out how the system got where it is today, financially. What shifts have been occurring, for example, in where the money comes from, and in where it goes? Do certain of these trends need to be reversed if possible—such as, for instance, the characteristic trend toward heavier dependence of education upon central government revenues, with less and less support coming from local governments and private sources?

Likewise they need to find out what has been happening to their unit costs. Has the composition been changing? Have increasing teacher costs crowded out essential expenditures for textbooks and other vital learning materials, without which even the best teachers are severely handicapped and their productivity reduced? If unit costs have been rising at various points in the system, what have been the main causes, and to what extent can the rise be countered?

To get answers to such questions as these, there is need for better analytical tools, and for better financial and cost accounting systems, as part of a far-reaching overhaul and modernization of the management of educational systems.

This book does not tell how all these things can be done; there is no book yet that does. But it does shed much useful light on what is involved, and on how to make a good beginning, by taking the reader through a painstaking exercise which lays bare the vital facts in one illustrative country, Nigeria.

Those who have even tried to collect reasonably consistent cost and financial data from any educational system will surely agree that the authors here have performed a remarkable feat of fact-gathering and analysis, by piecing together the picture not only for one year but for eleven consecutive years for every region of Nigeria. Beyond this, they have provided at the end of the monograph an invaluable bibliography.

The study, it should be noted, was completed just prior to the substantial political changes that occurred in Nigeria in 1967.

Dr. Callaway, a New Zealander, has been engaged in economic field research in Nigeria since 1960, as research associate of the Massachusetts Institute of Technology's Centre for International Studies. His collaborator, Dr. Musone from

Italy, was for three years a Unesco adviser on statistics to Nigeria's Federal Ministry of Education and is currently professor at the Unesco-sponsored Arab States' Centre for Educational Planning and Administration in Beirut. The Institute considers itself very fortunate to have secured the help of these well-qualified scholars in preparing this study, into which both invested enormous personal efforts.

The authors, and the Institute, express their thanks to the numerous individuals and organizations in Nigeria who co-operated in providing information and in reviewing earlier drafts of the study. Among these are many officials of federal, regional and local governments, representatives of Christian and Moslem missions, members of industrial and commercial firms, officers in embassies and consulates of foreign countries in Lagos, the Nigerian Union of Teachers, the federal and regional Scholarships Boards, the Bureau for External Aid for Education, the National Universities Commission, and the National Manpower Board. Thanks are also extended, along with best wishes for the future, to several Nigerian university students who assisted in the meticulous task of extracting data from scattered official documents.

The Institute joins Dr. Callaway in thanking the Carnegie Corporation of New York, which supported his earlier field research underlying this study, and the Ford Foundation, which assisted at the later stages, making it possible for the work to be completed and to be reviewed personally by Dr. Callaway with government officials throughout Nigeria. Although the Institute's aim in sponsoring this study was to make the useful lessons of Nigerian experience available to other countries, it has been gratifying to be assured by Nigerian officials that this effort to put the past in sharper perspective, has helped them see Nigeria's educational future more clearly.

Lastly, the Institute has welcomed this opportunity to co-operate with an older sister research institution, the MIT Centre for International Studies, whose director, Dr. Max Milikan, generously agreed to Dr. Callaway's participation in this IIEP enterprise.

PHILIP H. COOMBS
Director, IIEP

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Introduction

The importance of being historical

After more than a decade of unprecedented expansion in education, Nigeria has come to a period of review and re-assessment. A few years ago, the main problem being faced was 'how to get it on the ground' and—throughout the nation—primary schools, secondary schools, technical centres, as well as universities, were being built. Now, Nigeria operates an extensive system of modern formal education, requiring for its yearly development and running costs a significant proportion of the nation's available resources. New problems are at hand; new questions are being asked.

In its widest sense, the purpose of such a formal education system is to help bring about, and respond to, the desired directions and rates of change in the society and economy. By providing both general education and training in specific skills, this system encourages social change, and helps to raise output in all sectors of the growing economy. At its higher levels it generates engineers, doctors, veterinarians, teachers, while at its lower levels it creates literate youths ready to take up new vocations or to help initiate improved techniques in the traditional ways of making a living. The achievements of this system should be judged not only by the numbers of students who pass each year through its various stages, but also by the quality and vigour of their performance in class-rooms and in later life and by the extent to which these results are obtained in as economic manner as possible. And only an appropriately organized system of formal education can turn out the numbers and quality required at lowest cost to individual families and to the nation.

Confronted by rising numbers of school-age children and by advances in science and technology requiring long-term investment in new and higher-level skills, those responsible for educational planning have before them complex decisions. Above all, ideals of an even larger, more diversified, improved system of formal education

have to be matched continuously with competing claims for the use of present and future resources. This means that educational and training requirements, with their supporting financial demands, should be systematically determined.

An indispensable guide to such planned resource use for formal education is an ordered knowledge of how its financing has taken place in the past. Total educational expenditures for past years should be known and also the details on how these funds have been used. And because the ability to finance an expanding educational system is necessarily linked with the question of who pays, it is significant also to know the sources of the funds—whether from direct payments from households and other institutions within the private sector of the economy, or through taxes and other impositions, or from external assistance.

The present study is designed to provide this aggregate analysis of the financing of education in Nigeria for eleven years during a period of critical expansion: from 1952/53 through 1962/63. It is based on a set of relationships which make up total expenditures on formal education: the contributions made by the public and private sectors of the economy and by foreign aid; and, functionally, the amounts spent on different types and levels of education. In converting these relationships into working procedures, the study has progressed through separate but co-ordinated field inquiries into:

Contributions by the public sector—federal and regional governments; local and native authorities; other public agencies (corporations, boards, etc.).

Contributions by the private sector—households (payments to educational institutions by private persons in the form of fees); missions and other religious organizations; other private agencies (firms, ethnic unions, communal enterprises).

External aid (consumed both in the country and abroad, in the form of education).

The quantitative picture that emerges from this assembly of data reveals changing patterns in the financing of formal education during this eleven-year period. These patterns are evident in the amounts and the directions of expenditure: for the federation as a whole and for the federal and regional governments separately; for each type and level of formal education; and with respect to both capital and recurrent payments. From this layout of expenditures various proportions are obtained, e.g., of national product, of federal and regional budgets.

The span of years for this study was chosen as being sufficient to enable observed trends in expenditures and sources of funds to be meaningful as a guide to future policy decisions. The trends, therefore, are examined in terms of their components. Where the evidence permits, average costings are calculated; for example, unit costs per pupil, per class-room, in various parts of the country, and for various types and levels of education. Such unit costings can be a beginning step in attempting to obtain economies in the running of existing schools and universities, and—as a basis for achieving marginal costings—when planning expansion of particular

levels of education. Since these trends and costings are analysed on a federal and regional basis, use of the comparative method, which can be helpful in establishing various standards of economy in particular lines of education, is made possible.

Education in the context of development planning

Policy-makers are now asking leading questions. How high a proportion of national and regional incomes can reasonably be spent on education? How much can be expected from external sources? What types of education now require priority? Are there indications that the economy is not growing fast enough to absorb the output from certain stages in education? How can this formal educational system be more closely meshed with economic development? How can existing educational programmes be operated with greater efficiency?

Because in recent years the burden of its financing has increasingly been carried by governments, federal and regional, Nigeria's formal education has to a large extent become a publicly controlled service. Government decisions are all-important to its steady growth and improvement in quality: and these decisions condition the options that are open to students and parents. (Universities, of course, retain their characteristic autonomy, but the contribution to their financing from government sources is a vital element in their operation and development.)

These governments work out their blueprints for educational change within the context of the social and economic structure of their respective areas and of their bid for development. Plans are formulated to correct imbalances and to diversify the educational system, to expand it in desired directions, to improve facilities and instructional materials, to raise teaching performance by offering in-service and other training. From the administrative capitals control is thus exercised over the progress of education: regulations are issued, everyday problems are dealt with. Governments are helped in these duties by other agents of educational financing and administration—chief among which are the local and native authorities, and, for historical reasons, the missions. Government policies guide co-operation by commercial firms in their offering scholarships and on-the-job training programmes; they also determine the flow and directions of foreign aid for education.

Such planning of education is increasingly being recognized as an integral part of national development planning. Formal education competes with other demands for whatever scarce financial resources can be made available from the public and private sectors of the economy; and, at the same time, its pupils become potential agents for economic and social advancement. The impact of formal education, in fact, will be more or less effective depending on whether its share of expenditures is consistent with its significance in relation to other development needs (such as improving agriculture, encouraging industry, building dams and electric-power

plants) and whether it is interacting with these forces to achieve a balanced progress.

It is obvious that the growth of an economy can be retarded by having a formal education programme which is too small or emphasizes the wrong types of education. It is equally evident that the growth of an economy can be hindered by having an education programme (or part of it) which is too large for requirements, or too costly for the economy to bear, or obtains results at an unjustifiably high cost. As a general principle, then, the formal education system should be progressive enough to provide (as economically as possible) the essential general education and the professional and technical skills required in the future, yet fit into the chosen pattern of total resource use. In practice, of course, such over-all planning should be a continuous process involving the application and co-ordination of the principles of economics and of administration as well as the principles and techniques of education. And for its success, the general public must approve and willingly participate.

The view is sometimes expressed that formal education should be regarded as a basic right of citizenship. The provision of schools, with their attendant equipment and yearly payments for running costs, is thus considered a form of social welfare similar to the provision of modern medical facilities. Thought of in this way, education is an end in itself; its expansion is seen as a moral necessity and carried through on the principle of equality of opportunity rather than on more closely defined national objectives.

More widely accepted, however, is the view that formal education has multiple functions to perform, chief among which is the creation of well-educated people who will bring their talents, knowledge, and experience to bear as they take their diverse parts in the social and economic organization of the nation. All types and levels of formal education (including primary schooling) are thus considered a form of investment in the infrastructure of the changing society and economy. It is this approach that is usually regarded as more significant in determining the optimum amount of education and its balanced distribution among types and levels.

Following this approach, a rough guide to the required layout of the education system at its higher levels can be obtained from the economic plan and its projected rates and directions of growth. This gives a basis for manpower assessments: an inventory of higher-level skills classified by occupations and levels, gauged for a period of about twenty years ahead. From these expected demands for qualified people—by governments, industry, agriculture—the dimensions of educational needs can be better appraised. (On this time-scale, the expanding education system itself becomes a formidable user of its own products.) The next step may be to estimate the expected returns, to individuals and to society, from various types of education in relation to their expected costs. Because education is such a long-term investment with its returns delayed for one or two decades, these projections can at

best be only approximate. They can, however, provide some basis for comparison with similar calculations for other investments, inside and outside the formal education programme.

The organic nature of the education system must also be taken into account. Its parts are not separate entities but complementary; for example, the numbers of qualified teachers (plus those being trained) affect the quality of primary education some years ahead; the output expected from the secondary schools determines the intake possible to the universities. These relationships need to be considered in order to maximize the benefits accruing from a group of projects taken together.

Another way of looking at the system of formal education is to regard it as a large and costly enterprise requiring the techniques of business management. In education as in business, the options are many, frequently involving a variety of combinations of technologies and of methods of organization. Such an approach can be used to considerable effect when attempting to achieve economies both in the present layout of education and when considering alternative procedures for expansion of these facilities.

For this purpose it is important to examine in some detail the input side of educational efforts and to learn as much as possible about the productivity of these inputs by comparing unit costs. Thus, a lowering of unit cost per pupil without a lowering in educational standards brings about a rise in efficiency. Similarly, an improvement in standards of instruction which does not involve an increase in unit cost (or which involves a less than proportionate rise in unit cost) also represents an economy. Close scrutiny of the cost structure of educational institutions, perhaps using the comparative method, is also likely to reveal opportunities for achieving economies of scale in their operation.

Some realities of the Nigerian scene

In shaping the system of modern formal education to meet the demands of the future, the governments of Nigeria have to deal with conditions that have evolved through a unique historical experience. The first schools were founded well over a hundred years ago by Christian missionaries, both Nigerian and European; these schools were organized locally and were self-supporting. As education facilities spread, the governments of the day gradually took a greater share in the responsibilities of financing and of administration; and today regional governments direct large educational enterprises. In this process, public finance and educational development have become more and more closely related.

Because the early spread of education was patchy, there are today wide disparities among different areas in the proportions of children attending school. In some parts of Northern Nigeria, where Moslem communities had their own system of

koranic education and did not welcome Christian missionaries, the creation of schools along Western lines got a slow start; and although in recent years leaders in Northern Nigeria have become increasingly aware of the urgency of providing more facilities for modern education in these areas, the historical circumstances of a century cannot easily be compensated. Besides regional inequalities, there are also marked imbalances in the distribution of facilities within each region; there are areas remote from roads and rail where the percentage of children in primary schools is far less than that for the region as a whole. Other inequalities are found in the lower number of girls than boys attending school in many areas and of rural children compared with those in towns and cities.

At the opposite extreme are areas where parents early discerned the possible benefits from modern schooling. Here educational facilities multiplied to meet the demands, and a dynamic tradition grew up of pushing family members to the highest levels of education—and thus to positions of enhanced responsibility on the national or regional scene.

In expanding educational facilities, governments may thus be faced with a conflict in the use of resources: whether to promote primary schooling in areas which have been relatively neglected (and where demands may still not be strong) or whether to place more emphasis on building up technical and other kinds of higher education for higher-level skills; in other words, whether to provide greater equality of opportunity or to press for efficiency in meeting more closely determined manpower needs.

Even in areas where facilities are available, some children may not be able to take advantage of primary schooling because of inability to pay school fees. There are wide differences in the incidence of who pays for education; in some areas payments are made directly by parents and in other areas indirectly through taxes, or through various combinations of fees and taxes. This burden of paying for education impinges with greater or lesser intensity depending on individual family incomes and ultimately on natural economic resource endowments.

Lively debates on 'curriculum reform' have gone on for decades in Nigeria. The issues have to do with relations of school to community, of material being taught and its usefulness to the individual in his later service to society; the discussion is usually focused on the suitable proportions of different types of education—general and vocational, literary and scientific. Such attempts to adapt education more closely to the practical needs of the changing social and economic scene by shifts in subject-matter are related to the continuing effort to improve the quality of education of all types. Again, throughout the country there are wide differences in quality standards, particularly in the effectiveness of basic education. The rapid expansion of primary education in Western and Eastern Nigeria during the late fifties brought an inevitable fall in standards; alert to this, the governments concerned have placed much greater emphasis on the upgrading of teachers. A key

component to achieving more uniform and higher standards in education is thus seen to be the creation of a strong teaching profession—by considering their training, their wage scales, their conditions of service, as well as the facilities they have to work with in the class-room.

Plans for improving the formal education system have also to take into account other forms of education currently going on in the society. Other departments of government undertake such activities as the agricultural extension service, health and community-improvement education, nurses' training, as well as on-the-job technical training. The larger commercial firms and industrial enterprises also offer training courses for technicians and managers. In addition, many kinds of education are initiated by small private enterprises, such as technical institutes, typing and commercial schools—often of indifferent quality. Then there are private training courses for the general certificate of education (GCE), as well as correspondence courses being taken from centres abroad. Also deriving from indigenous education are many types of apprentice training in markets, transport, and small industries. These reflect the determined drive for self-improvement in different parts of society. For educational planners, the boundary is obviously a shifting one between what is now considered as formal education and these many complementary forms.

While in principle there is a stringent logic to the planning of resource use for education, the realities of the scene require a high order of flexibility. For example, there must be a healthy scepticism about easy correlations between more formal education and higher levels of economic performance. People with no or very little formal education do make considerable contributions to development. (An outstanding example in Nigeria: the women traders, who have created large networks for the distribution of goods involving millions of pounds.) A further danger is the possibility of placing too much emphasis on projections for the future: the economy may develop in such a way that surpluses of educated persons may occur. Yet when these and similar reservations have been made, it is clear that the achievement of well-balanced programmes of formal education are vital to the process of modernization.

For its success in practice this means that the machinery of administration be suitable for the tasks put upon it; that consultation of interested parties be continuous (parents, employers, administrators). The job to be done cannot be isolated from the methods of getting it done.

1 A general analysis of educational expenditure¹

Educational expenditure and national accounts

The statistical series of national economic aggregates referred to in this paragraph consist of those which were available at mid-year 1965 from official publications in Nigeria. These are shown in the tables of Appendix A. In order to obtain comparable series, the original data were processed as follows:

1. Gross domestic product (GDP) at current prices was available only for the period 1952-57 from the estimates of P.N.C. Okigbo, while for the period 1958-62 we were able to obtain only the series at constant prices calculated by the Federal Office of Statistics (FOS) and published in the 1964 Progress Report of the National Development Plan. We have assumed for this period a general annual increase in prices of 2 per cent and on the basis of this assumption we have linked the 1958-62 series to those given for the period 1952-57.
2. Gross capital formation (GCF) was available at current prices for the periods 1952-57 and 1957-62 respectively from the two above-mentioned sources. The figures for the link year given in both sources, however, were slightly different owing to changes in the methods of calculation adopted by the FOS. Taking as a basis the figure calculated by the FOS, we have linked the two series through chain indices and obtained the new series shown in Table 1 of the appendixes.
3. The series on consumer expenditure was available only from the Okigbo source for the period 1952-57 at both current and constant prices. We have calculated the series at current prices for the period 1958-62 assuming the identity between consumption, on one side, and GDP at factor cost less GCF, plus the excess of the value of imports over the value of exports, on the other.²

1. For a general view of the procedure, definitions, and terms used in the present study, please see 'A note on methodology' on page 181.

2. The relationship $C = (Y - I) + (M - X)$ is derived from the general relationship $Y = C + I + X - M$. See R. Stone and G. Croft-Murray, *Social Accounting and Economic Models*, London, Bowes and Bowes, 1955, p. 16.

TABLE 1. Educational expenditure from internal sources as compared with national economic aggregates (at current prices), 1952 to 1962 (in £ million)

	1952	1954	1956	1958	1960	1962
1. GDP (at factor cost)	614.5	774.2	870.6	918.0	1 040.2	1 179.5
2. Consumers' expenditure	536.5	673.3	792.7	839.5	957.3	1 054.4
3. GCF: Total	47.3	62.8	88.9	109.2	129.1	159.8
4. GCF: Public sector only	18.2	25.8	35.5	49.8	61.5	64.5
Educational expenditure from internal sources						
5. Recurrent and capital	9.7	14.2	20.4	25.8	34.5	41.7
6. Recurrent only	7.1	10.6	16.2	20.5	29.7	35.0
7. Capital only	2.6	3.6	4.2	5.3	4.8	6.7
<i>Percentages</i>						
(5) over (1)	1.58	1.83	2.34	2.81	3.32	3.54
(6) over (2)	1.32	1.57	2.04	2.44	3.10	3.32
(7) over (3)	5.47	5.73	4.72	4.85	3.72	4.19
(7) over (4)	14.3	14.0	11.8	10.6	7.8	10.4

A comparison of educational expenditure from internal sources with the three national economic aggregates mentioned above is given in Table 1. As the table shows, total educational expenditure from internal sources at current prices rose from £9.7 million in 1952 to £41.7 million in 1962. As a percentage of GDP, educational expenditure passed from 1.58 per cent to 3.54 per cent in the same years, showing a constant increase during the whole period. The actual annual rate of increase of expenditure (that is, the increase in actual expenditure as shown by the absolute figures) was 33.0 per cent, while the relative annual rate of increase (that is, the increase in the share of GDP devoted to education) was much lower: 12.4 per cent.

Total recurrent expenditure at current prices rose from £7.1 million in 1952 to £35.0 million in 1962, the actual annual rate of increase being equal to 39.3 per cent. This represented respectively 1.32 per cent and 3.32 per cent of the total consumers' expenditure in the same years, showing a relative annual rate of increase of 15.2 per cent.

Capital expenditure, especially in relative terms, did not follow the same constant upward trend observed for recurrent expenditure. In 1952, the estimated £2.6 million invested represented 5.47 per cent of GCF, but in 1956 an investment in educational facilities of £4.2 million represented only 4.72 per cent of total investment and the percentage fell even lower, to 3.72 per cent, in 1960, to rise again in 1962 to 4.19 per cent when the amount invested in educational capital goods reached £6.7 million.

Educational expenditure and the budgets

The budget accounts taken as reference in this paragraph are those which are shown in Tables 5 and 6 of Appendix A. In these tables an attempt has been made to reconstruct from a number of different documents an economic analysis of the government budgets over the period 1955-62. Recurrent expenditure shown here, therefore, excludes all appropriations of funds to other budget accounts and capital expenditure excludes loans and financial investments. The figures given represent, very approximately only, actual expenditure for the purchase of goods and services and grant transfers made to persons and institutions including local governments.

In Table 2, educational expenditure is given as a percentage of total expenditure for the three regions and for the consolidated expenditure account of the whole Federation.

The marked differences shown in the percentages of educational expenditure as compared with total government expenditure in each region and in the Federation as a whole need an explanation.

After October 1954, when the regional governments became autonomous, they had to meet their financial obligations towards the educational system, consisting mainly of the grants-in-aid allocations, from their own internal sources of financing. The education grant they had received between 1951 and 1954, and which was proportionate to their grants-in-aid commitments, was discontinued and the

TABLE 2. Education as a percentage of government expenditure in the regional accounts and in the consolidated account for the Federation during the period 1955-62

Region	1955	1956	1957	1958	1959	1960	1961	1962
<i>Recurrent expenditure</i>								
Northern	20.1	25.4	24.0	24.5	24.4	23.0	22.4	23.3
Eastern	37.6	42.5	49.0	43.4	45.2	44.9	41.5	38.2
Western	40.7	36.5	42.8	41.3	40.8	43.9	44.6	47.3
Federation	16.4	18.7	22.0	21.2	21.4	22.6	21.3	...
<i>Capital expenditure</i>								
Northern	21.1	10.0	12.5	11.7	13.6	22.2	25.9	17.3
Eastern	6.6	40.9	10.9	5.7	4.6	6.9	3.4	6.5
Western	34.2	40.9	41.9	17.1	9.7	10.1	5.6	4.1
Federation	12.1	13.5	11.7	10.2	5.5	5.8	5.8	...
<i>Recurrent and capital expenditure</i>								
Northern	20.5	19.5	19.5	19.7	20.7	23.9	23.6	21.5
Eastern	28.4	42.3	43.0	34.0	34.8	36.7	28.2	26.9
Western	38.7	37.5	42.6	33.7	28.1	30.5	29.1	29.5
Federation	18.7	17.3	18.7	17.0	15.2	16.1	15.5	...

federal revenue was reallocated on different criteria which did not give special consideration to such commitments.

Especially at the beginning of the new financial régime, the regions' own internal revenue, particularly in the two southern regions, where an effective system of internal taxation was still to be established, was almost non-existent. For these two regions, therefore, the federal grant allocation represented almost their entire revenue. With the suppression of the education grant, the financial obligations of the federal government towards education were restricted to the school system operating in Lagos, the University of Ibadan, and the Nigerian College of Arts, Science and Technology.

This partly explains why, since the beginning of the period under review, the Eastern and Western Regions—where the bulk of the national educational system was concentrated—already had 37.6 per cent and 40.7 per cent respectively of their recurrent budgets committed to educational expenditure. In these two regions, in fact, grants-in-aid covered 78.7 per cent and 82.2 per cent respectively of the total expenditure for education.

In addition, the Western Region, in 1955, and the Eastern Region, in 1957, introduced free primary education schemes, thus increasing further the drain on their finances. It is difficult to explain in a brief comment what the reasons were that persuaded the respective governments of the financial feasibility of such schemes. There were, obviously, some miscalculations and a certain overdose of optimism, but probably the decisive factor will be found in the commitment that the newly appointed governments felt towards the population, as the free primary education schemes had been a major issue in the campaign for autonomy.

Viewed as a whole, expenditure for educational purposes, though high, remains within the limits generally observed in other developing countries, ranging between 18.7 per cent and 15.2 per cent of total government expenditure, but if we consider the three regions separately, we find that in the East and West the percentages exceed by far what is normally expected. In the North, education absorbed between 19.5 per cent and 23.9 per cent of the total; in the East, between 26.9 per cent and 43.0 per cent; in the West, between 28.1 per cent and 42.6 per cent.

Although the regions did not contribute out of their own budgets to services such as foreign affairs, defence and railways, which were the responsibility of the federal government, all other services were provided directly, including justice, regional police, radio and television networks, etc. Within this broad autonomy, the high level of educational expenditure may perhaps have limited the capacity of the regional governments to intervene effectively in other, also vital, sectors of social and economic development such as agriculture and health.

In fact, even educational investment as a whole appears to have been more the result of pressures brought about by circumstances than the result of the imple-

mentation of a co-ordinated economic plan for the best use of available financial resources. This becomes evident if the percentages of recurrent and capital expenditures are examined separately.

For the over-all Federation, recurrent expenditure, after having risen from 16.4 per cent to 22.0 per cent in the first three years, remained around that level throughout the subsequent period, while capital expenditure, which in 1957 was still at the level of 11.7 per cent, declined sharply to 5.5 per cent in 1959 and remained at that low level afterwards. This contrast is not only apparent but reflects a real decrease in over-all government capital investment in education which took place in a period of general expansion of the whole educational system.

If we look at the regional analysis we can see that the situation presented by the national figures reflects, however, only the trends which can be observed in the two southern regions. As for the Northern Region, the share of capital expenditure devoted to education shows a fairly constant trend between 1956 and 1959 and a definite increase in the following years.

Economic analysis of government expenditure

In the analysis of government expenditures we have considered two main types of transactions: (a) purchases of goods and services, represented by the money spent directly by the ministries of education for their own administrative and educational establishments and for their dependent units, and (b) transfers, represented by grants-in-aid to local authorities and voluntary agencies, scholarships to students at home and abroad, and subventions and subsidies to universities and other organizations operating in the field of formal education.

Loans and interests were not taken into consideration because in the records such transactions could not be properly analysed in order to separate, or estimate, the part attributable to the educational sector.

As regards recurrent expenditure, the economic analysis of the consolidated budgets shown in Appendix A is comparable with the above aggregates, but for capital expenditure different criteria have been followed and sums disbursed as grants or subventions have been considered as direct investments.

It is, however, interesting to examine the importance of direct expenditure and transfers for education as compared with total direct expenditure and transfers for the recurrent items only, as shown in Table 3.

As the table shows, direct expenditure for education represented between 5.8 per cent and 6.9 per cent of total direct expenditure, showing a trend of increase in the first and last three years of the period under review; and of decrease between 1957 and 1959. The percentage of transfers, on the other hand, increased constantly, except for a slight decrease in 1960. In 1955, transfers represented 47.0 per cent of

TABLE 3. Educational expenditure as a percentage of total aggregates in the economic analysis of combined federal and regional government budgets (recurrent only) in the period 1955/56 to 1961/62

Year	Total budget (in £ million)		Education as a percentage	
	Direct expenditure	Transfers	Of direct expenditure	Of transfers
1955	31.7	16.5	5.8	47.0
1956	33.6	23.3	6.6	47.7
1957	36.0	22.7	6.9	55.3
1958	41.4	20.0	6.7	63.9
1959	52.3	22.2	6.0	70.3
1960	58.9	28.9	6.5	69.0
1961	64.2	27.7	6.9	72.8

the total aggregate, but in 1961 almost three-quarters—72.8 per cent—of such disbursements were allocated for education.

As most of the transfer aggregate represents the central government contribution towards the cost of institutional services to be borne by local governments, such as education, health, public utilities, housing, rural and urban development, and police, the large amount devoted to education certainly affected development in other sectors. There is no doubt that this situation disturbed some local authorities and there were cases of grants destined for education being diverted to other purposes. This is illustrated in special reports, of recent years, on local government finances.

Trends in government expenditure for education

Government expenditure for education increased at a very fast rate over the period under review: from £6.2 million in 1952/53 to £31.1 million in 1962/63. This trend, which shows an average increase of £2.5 million a year, is the result of three main factors: (a) the expansion of the school system; (b) increasing unit costs, especially for the component referring to teachers' salaries and new school buildings; and (c) increasing financial commitments towards the assisted sector of the school system owing to changes introduced in the grants-in-aid formula.

Recurrent costs were responsible for most of the increasing trend. Capital expenditure, although on the average it compared with recurrent expenditure in the ratio of 1:4.5, changed noticeably along the whole period from a maximum of 1:2.6 in 1953/54 to a minimum of 1:6.25 in 1961/62. Perhaps the different trends in capital and recurrent expenditure are best shown by Figure 1, where the lines of best fit have been calculated for the two series separately, with the origin ($X = 0$) in the year 1957/58.

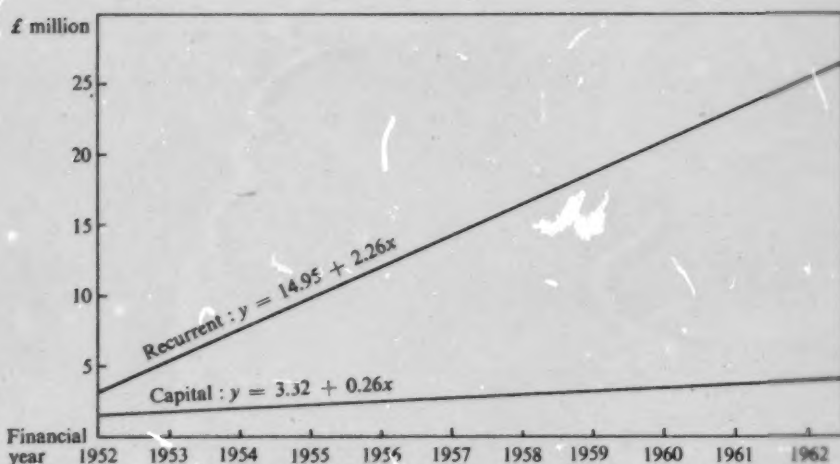


FIGURE 1. Lines of best fit for total government capital and recurrent expenditure for education, 1952/53 to 1962/63

Government funds allocated to the ministries of education were redistributed among the following users: (a) administrative and controlling bodies, including the ministries of education and their dependent units; (b) the formal school system with its three principal levels of education—primary, secondary, and higher; (c) the non-formal school system, in this case represented mainly by adult education; and (d) students abroad, represented exclusively by government scholars.

The proportions in which the various users shared the funds available changed over the period under review, as shown in Table 4.

As can be seen, in the first half of the period, primary and adult education increased their share at the expense of all other users, passing from 50.2 per cent and 0.3 per cent in 1952/53 to 57.2 per cent and 1.3 per cent respectively, while secondary education decreased from 29.8 per cent to 24.5 per cent and higher education from 9.1 per cent to 7.6 per cent.

In the second half of the period the trend is reversed with primary education decreasing to 47.0 per cent, a percentage even lower than in 1952/53, and adult education to 0.7 per cent, while secondary education returned to its original share with 29.5 per cent and higher education increased to 12.1 per cent. The same trend can be observed for government scholars, who in the overwhelming majority were university students.

Capital expenditure was almost totally absorbed by the formal school system. Very little went to adult education, and government administrative units were usually housed in already existing government buildings, or together with other departments.

TABLE 4. Total government recurrent expenditure on education, by users of funds, in the financial years 1952/53, 1957/58 and 1962/63

	1952/53	1957/58	1962/63
Total expenditure (in £ thousand)	4 885.0	15 557.9	26 350.9
<i>Users of funds (percentage)</i>			
Administrative and controlling bodies	5.8	4.9	5.0
Formal school system	89.1	89.5	88.6
Primary education	50.2	57.2	47.0
Secondary education	29.8	24.3	29.5
Higher education	9.1	7.6	12.1
Non-formal school system	0.3	1.3	0.7
Students abroad	4.8	4.5	5.7

Figure 2 (see page 110) shows the general trend of capital expenditure for the three levels of formal education, including both direct expenditure and transfers.

A proper comparison of the trend is possible only for education at the first and second levels. The data collected from the accounts of the various governments for these two levels show the disbursements by the treasuries, a series of data which can be assumed as corresponding to the value of fixed assets added in each financial year. The situation is different for the universities which received subventions for the implementation of development projects usually still to be carried out.

At the beginning of the period under review, primary education did not receive special government assistance for capital expenditure except for some building grants allocated within the general regulations. It was only after autonomy was achieved that the regions sooner or later established development policies including the building of primary schools with government assistance. The investment rate in this sector, therefore, rose sharply in 1954 to almost £1.8 million and thereafter, though generally declining, remained always above £1 million.

Secondary education, after a period of gradually growing investment which raised the amount from £0.64 million in 1952/53 to £1.6 million in 1959/60, increased sharply after Independence, to £2.3 million in 1960/61 and £2.6 million in 1961/62, dropping to £2.0 million in the following year.

Higher education shows three periods of government allocation, one in 1953/54; another in 1956/57 to 1958/59; and a third, which was just at its beginning in 1962, when the governments began financing the new universities.

A general view of expenditure for education in 1962

In Table 5, an attempt has been made to reconstruct the likely distribution of all educational expenditure in the year 1962, by sources and uses. Some items are roughly estimated, but we believe that the table gives an approximate idea of the order of magnitude of the most important aggregates forming the expenditure pattern, and that this could be a useful guide for the future.

In the table, uses of finance have been distinguished into five aggregates: (a) formal education, (b) non-formal education, (c) universities, (d) students abroad and (e) common services.

Formal education includes all institutions which are part of the formal school system at the primary and secondary levels. We have shown the universities separately because of their autonomous status which made it difficult in the table to classify them either as government or private institutions. Formal education absorbed £29.4 million for recurrent expenditure, of which £20.15 million came from government sources; £2.0 million from local authorities; an estimated £6.85 million from private sources, mainly from fees and a small amount from services rendered without compensation, and £0.4 million from external aid, representing the estimated salaries of teachers and volunteers in service in that year.

Non-formal education includes adult education at all levels offered by the ministries of education and other government agencies, as well as by private institutions. The over-all expenditure of £1.5 million for non-formal education,

TABLE 5. Educational expenditure by sources of financing and uses, in 1962 (in £ million)

Uses	Sources of financing				Total
	Government	Local authorities	Private	External aid	
<i>Recurrent expenditure</i>					
Formal education	20.15	2.00	6.85	0.40	29.40
Non-formal education	1.25	.	0.15	0.10	1.50
Universities	3.60	.	0.35	0.35	4.30
Students abroad	1.50	0.05	0.75	0.95	3.25
Common services	1.35	0.25	0.05	0.70	2.35
Total	27.85	2.30	8.15	2.50	40.80
<i>Capital expenditure</i>					
Formal education	3.10	0.25	0.25	0.40	4.00
Non-formal education	.	.	.	.	.
Universities	2.50	.	.	0.55	3.05
Students abroad	.	.	.	.	.
Common services	.	.	.	.	.
Total	5.60	0.25	0.25	0.95	7.05

and the contributions made to it from the various sources, have been roughly estimated.

The expenditure by universities has been derived from their own accounts. This does not necessarily coincide with the amounts allocated by the governments in the same year. The total expenditure of slightly over £4 million has been integrated with the estimated cost of university staff on the pay-roll of external aid agencies. Expenditure financed from private sources includes fees and other internal income, such as rents, interest, etc., from which has been deducted the amount paid by the governments in scholarships. No estimate has been made of internal scholarships granted by local authorities and by private concerns.

For students abroad, the governments of Nigeria spent about £1.5 million and it has been estimated that another £0.95 million has been paid by external aid agencies. Private expenditure estimated at £0.75 million is merely a guess.

Common services include administration and other services such as examinations, school libraries, health services, etc. It has been estimated that the contribution of external aid, excluding research and studies, amounted to £0.7 million.

Capital expenditure for the non-formal school system has been considered as nil or not appreciable. The contribution of external agencies to capital expenditure in the formal school system refers mainly to the comprehensive schools and to the Lagos Advanced Teachers' College. The private capital expenditure is another guess.

In Table 6, the distribution of recurrent expenditure within the various sectors of the formal school system is shown. Even in this case the apportionment of external aid has been estimated.

As Table 6 shows, most government financing went to private education which

TABLE 6. Recurrent educational expenditure for the formal school system, by sources of financing and recipients of funds, in 1962 (in £ million)

Recipients of funds	Sources of financing				Total
	Government	Local authority	Private	External aid	
Government schools	3.55	.	0.25	0.30	4.10
Primary	0.15	.	.	.	0.15
Other	3.40	.	0.25	0.30	3.95
Local authority schools	3.15	2.00	0.53	0.05	5.73
Primary	2.90	1.70	0.15	.	4.75
Other	0.25	0.30	0.40	0.05	1.00
Private schools	13.65	.	6.05	0.05	19.55
Primary	9.30	.	2.90	.	12.20
Other	4.15	.	3.15	0.05	7.35
All schools	20.15	2.00	6.83	0.40	29.40

forms the bulk of the assisted sector. This absorbed £13.45 million, or 66.7 per cent of total government outlay, and 68.8 per cent of total expenditure in the private sector.

Direct financing of private schools by local authorities has been omitted, as there was no basis for even approximate estimation. We believe, however, that such financing did not occur frequently in 1962.

Government and local authority financing has been adjusted by subtracting fees paid into the respective revenues and by adding the amounts paid for scholarships at the secondary level.

Finally, we have assumed that the great majority of external aid personnel services in government schools.

2 Primary education

Changes in the organization of primary education

The different historical development of the Southern and Northern Regions of Nigeria before their unification in 1914 accounts for variance in their school systems, particularly at primary level. At the beginning of the period under review, the Northern Region school system was based on a four-year primary course followed by a four- to five-year middle school. From 1952, the primary course became the junior primary; and most of the middle schools were changed to a three-year senior primary course, while some were upgraded to secondary schools. This system was continued throughout the period as the old middle school disappeared. Due to their origin, junior and senior primary schools were, in most cases, established as separate institutions, but later the unification of the primary courses brought with it the extension of many junior primary schools into a full seven-year course and the merging of junior and senior primary schools where possible. The age of entry, previously at 8-plus, was reduced to 7-plus and finally to 6-plus.

In the South, the primary course initially lasted eight years and generally consisted of two years' preparatory training, called infant classes, followed by six standards. The primary institutions varied from the full eight-year course to a four-year course consisting of the two infant classes and the first two standards called junior primary, and in some cases were limited to the two-year infant course only. The age of entry to the infant classes was set at 5-plus.

When in October 1954 the second Macpherson constitution gave the regions full autonomy in the field of education, the Western Region abolished the infant classes, brought the age of entry to 6-plus and reduced the primary course to six years' duration. The inevitable contractions in the length of training caused by such changes were matched by the introduction on a large scale of the secondary modern school, a three-year course considered as junior secondary level.

In the East and in Lagos (which at that time was severed from the Western Region and constituted a separate territory for the seat of the federal government), the old structure of the primary school system was maintained. In the East, however, the regional government in 1961 adopted a scheme for the reduction of the primary course to six years and gradually began to abolish the infant classes. In that year the age of entry was raised to 6-plus and no fresh intake was admitted, and in 1963 the two top classes were merged.

All these changes obviously render the comparison of enrolments very difficult and are reflected in the comparison of expenditures as well, since often economic considerations influenced the policy decisions.

Changes in the system of financing

At the beginning of the period under review, the whole school system was organized into (a) a government sector administered and financed directly by the federal or regional governments, (b) an assisted sector including schools operated by local authorities and by voluntary agencies eligible to benefit from government grants-in-aid on the basis of existing regulations, and (c) a non-assisted (private) sector including all other schools which were financially self-supporting. Usually schools in the non-assisted sector expected to become assisted as soon as they could meet the minimum requirements laid down by the central authorities.

The passage from the non-assisted to the assisted sector was a sort of mass phenomenon between the years 1949 and 1954, and the non-assisted sector, which in 1952 still included 17.2 per cent of all primary schools, disappeared almost entirely in the following years. The government sector had already thinned out before World War II when the central government, because of administrative difficulties, decided to hand over most of its schools to voluntary agencies and local authorities. During the period studied, no new government primary schools were added, with the exception of the specially built Kaduna Capital School in the North and the Lagos Demonstration School which was practically a part of the federal government teacher-training college to which it was attached.

In 1954, therefore, most of the primary schools were supported by government assistance through the grants-in-aid regulations which (as explained earlier) charged on the government budgets the full salary bill and a per-pupil capitation sum for other expenses, less the assumed local contributions. This system paved the way for the introduction of the free primary education schemes, which abolished the collection of fees and transferred the financing responsibility entirely to public funds.

The new system of financing remained practically the same grants-in-aid system but extended to almost all existing schools. The administrative and financial

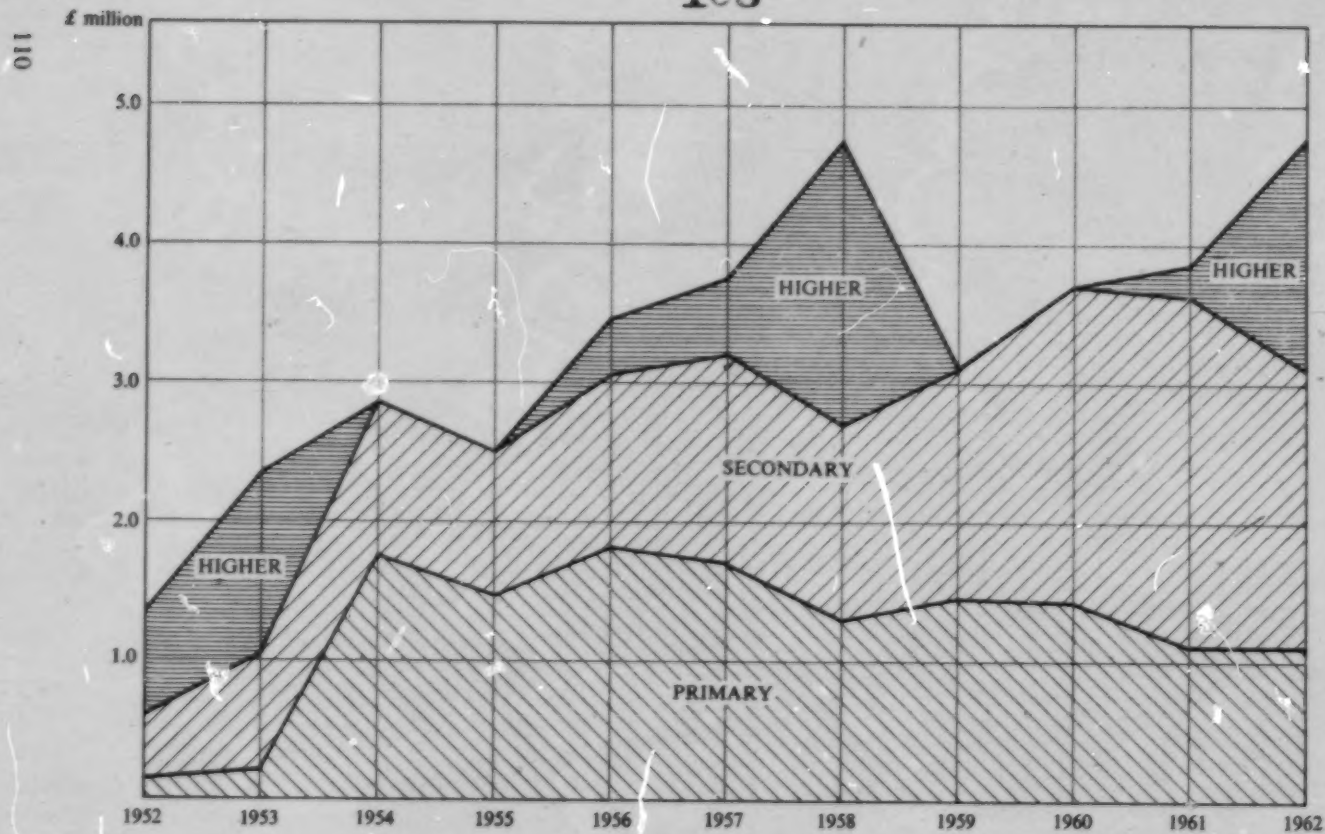


FIGURE 2. Government capital expenditure by level of education, 1952/53 to 1962/63

control of the schools, including the recruitment of teachers, was left to the school proprietors. Obviously the governments did not have the field administrative machinery necessary for a complete take-over of the school administration and, in addition, such a move would have encountered strong opposition from the more powerful of the missionary organizations which were in control of the greater part of the assisted sector.

The free primary education schemes

First to introduce free primary education was the Western Region where the scheme was adopted as from 1 January 1955. The regional government also tried to enlarge the public sphere of control by establishing some local education authorities and by transferring the financial administration of the grants to the local authorities. The system, however, did not work as expected and in 1959 the direct payment of grants was resumed. Local authorities, in the preparatory stage, were asked to collect education rates which were intended to cover between 30 per cent and 45 per cent of the recurrent costs, but the majority made it clear that they were unable to impose a new taxation, whatever its name and purpose. The regional government then decided to limit the contribution of the local authorities to the 'maintenance' of the primary school system in their areas of jurisdiction, but this vague formulation only left them free to contribute whatever they could—in most cases very little or next to nothing.

In the Eastern Region, where the free primary school scheme was also preceded by the experiment of education rating, this was in fact enforced on the population, especially in the years immediately following the regionalization of education. The reaction, however, was so negative that in the face of spreading turmoil the regional government had to discontinue education rating by law in April 1956. Despite this set-back and the prospect that the regional government would have to foot the bill in its entirety, the free primary education scheme was introduced as from 1 January 1957. The government bill rose to such proportions, however, that before the end of that year fees had to be reintroduced for almost all classes.

In Eastern Nigeria, the free primary education experiment was accompanied by an attempt to form a competing nucleus of primary schools controlled by local government and established under the name of universal primary education (UPE) schools. These schools, built in a hurry in 1956, in number exceeding 1,700, insufficiently financed from government funds and still unfinished at the end of 1957, did, however, survive the difficult time of their beginnings and have remained a sizeable contingent of public schools within the large majority of voluntary agency schools. Fees reintroduced at the end of 1957 were in the following years gradually withdrawn and at the end of the period under review were charged only for the last

three standards, up to a maximum of £5 for standard IV and £8 for standards V and VI.

In Lagos, the free primary education system was introduced as from 1 January 1957 and continued throughout the period under review. The federal government administered the primary school funds directly through the Lagos Education Office, a subordinate branch of the ministry of education, while the Lagos Town Council was asked to contribute at a rate finally agreed upon as 30 per cent of total recurrent expenditure. In 1962, responsibility for administering primary education was completely transferred to the Lagos Town Council acting through its education department and the government grant was paid into the council treasury.

In the North, primary education was still at the initial stage of development and, considering the vastness of the region and its large population, a scheme of universal primary education was unthinkable. The Northern Region government followed a policy of limiting the expansion of the voluntary agency school system in order to preserve as much as possible the existing religious character of the region (which represented a strong political factor). The grants-in-aid system was, therefore, continued unchanged while the native authorities and local emirates endeavoured to expand the public school system in their areas where the penetration of voluntary agency schools was usually controlled or strictly prohibited. This policy explains the more balanced development of the two sectors (schools administered by local authorities and those by voluntary agencies) in the North.

The Northern Region government was primarily concerned with the development of education in rural areas and primary schools there were almost entirely financed from public funds, firstly because most rural schools were operated by native authorities, and secondly because from 1958 voluntary agency schools in rural areas also became fully financed from the regional government.

The development of primary education

Table 7 shows the most salient quantitative aspects of the development of primary education in Nigeria in the period under review.

In 1962, the 15,586 schools existing throughout the Federation were attended by over 2.8 million pupils who were taught by almost 100,000 teachers. The distribution among the regions presented wide differences as compared to their total areas and populations. In the Northern Region, with less than one primary school per 100 square miles of territory, enrolments represented 17.8 per 1,000 population according to 1962 population estimates, or 12.1 according to the results of the 1963 census.

In the East, there were twenty-two schools per 100 square miles of territory for an enrolment of 148.2 (or 102.2) per thousand population.

TABLE 7. Main characteristics of primary-school development

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Number of schools, 1962	2 568	6 478	6 420	120	15 586
Number of pupils, 1962 (thousand)	359.9	1 266.6	1 109.0	98.5	2 834.0
Number of teachers, 1962 (thousand)	11.6	44.6	40.1	3.0	99.3
Teachers' qualifications, 1962 (percentage)					
Grade II and better	14.8	16.8	8.5	29.0	13.6
Grade III	37.2	30.9	24.8	31.9	29.2
Average number of pupils, 1962					
Per school	140	196	173	821	182
Per teacher	31	29	28	33	29
Number of schools per 100 square miles of territory, 1962	0.9	22.0	14.1	4.4 ¹	4.4
Number of pupils per 1,000 population as compared with					
1962 population estimates	17.8	148.2	152.7	400.0	77.7
1963 population census	12.1	102.2	86.6	148.1	50.9
Increase in the period 1952-62					
In number of pupils (thousand)	237.9	747.6	709.0 ²	61.5 ³	1 793
In number of schools ²	1 000	2 500	2 400	40	5 940
In number of class-rooms ²	5 400	21 500	22 000	650	49 550
Annual rate of increase in the number of pupils, 1952-62 (percentage)	19.5	14.4	17.7	23.7 ⁴	17.2
1. Number of schools per square mile		3. Increase over the period 1955-62			
2. Estimated		4. Annual rate of increase: 1955-62			

In the West, there were 14.1 schools per 100 square miles of territory and 172.7 (or 86.6) primary school pupils per 1,000 population.

The national average, strongly influenced by the low rates of the Northern Region, was 4.4 schools per 100 square miles of territory and 77.7 (or 50.9) primary school enrolments per 1,000 population.

These figures reveal a situation far from encouraging. Yet, during the years covered by the present report, the pace of development was remarkably rapid. Enrolments throughout the Federation increased at the annual rate of 17.2 per cent, with regional rates showing increases of 19.5 per cent in the North, 17.7 per cent in the West and 14.4 per cent in the East. In the federal capital, the annual rate of increase from 1955, the year of its constitution, was 23.7 per cent. In absolute terms the total number of pupils at school increased by about 1.8 million and an estimated 6,000 schools and 50,000 class-rooms were added to the existing stock.

The scarcity of adequately qualified teachers was obviously one of the main problems although this did not prevent the regional governments from making bold plans. Still in 1962, only 13.6 per cent of the over-all teaching staff possessed

the Grade II teachers' certificate (requiring a minimum of four to five years' post-primary education in a teacher-training institution) and 29.2 per cent had the Grade III teachers' certificate (obtained after only two or three years' post-primary education). The remaining teachers, in the great majority, had barely completed the primary course or had failed to complete teacher-training education.

In the regions, the situation presented some differences. In the North, Grade II and Grade III teachers constituted respectively 14.8 per cent and 37.2 per cent of the total; in the East, 16.8 per cent and 30.9 per cent; and in the West, only 8.5 per cent and 24.8 per cent. The low percentages for the Western Region are explained by the existence of the secondary-modern-school system which absorbed a good many of the trained teachers. Those qualified as primary school teachers, however, were employed in secondary schools almost everywhere. The situation was obviously much better in the Federal Territory where Grade II teachers represented 29.0 per cent and Grade III teachers 31.9 per cent of the total teaching staff.

The sources of financing

The different policies adopted by the various governments influenced the financing of primary education. Generally, total expenditures increased at a higher rate than over-all enrolments due to increases in unit costs, particularly from rises in teachers' salaries.¹ If we compare the annual rate of increase in over-all recurrent expenditure with the increase in enrolments, we have 31.7 per cent as against 17.2 per cent in the whole Federation, 39.0 per cent as against 19.5 per cent in the North, 25.9 per cent as against 14.4 per cent in the East and 33.0 per cent as against 17.7 per cent in the West. In Lagos, where the calculation refers to the period 1955-62, expenditure increased at the annual rate of 30.2 per cent while enrolments increased at the annual rate of 23.7 per cent. The main characteristics of recurrent expenditure for primary schools analysed by source of financing is given in Table 8.

The analysis distinguishes the three main sources of financing — namely government, local authorities, and private sources; and the three main aggregates: (a) *government sources*, (b) *public sources*, including government and local authority financing, and (c) *local sources*, including local authority and private financing.

As Table 8 shows, in 1962 government sources represented 76.2 per cent of total expenditure in the country as a whole and 94.6 per cent in the West, where the free primary-school system was almost completely at the charge of the regional government. In the Federal Territory, the government contributed 51.7 per cent and local

1. During the period under review, salary increases were effected in all of the Federation in 1956 and 1959/60.

TABLE 8. Recurrent expenditure for primary schools analysed by sources of financing

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total recurrent expenditure, 1962 (£ thousand)	2 671.7	6 244.5	6 359.9	971.5	16 247.6
Sources of financing					
Government	1 717.7	4 151.7	6 014.6	502.7	12 386.7
Local authorities	657.8	756.0	345.3	393.6	2 152.7
Private	291.2	1 336.8	.	75.2 ¹	1 708.2
As percentage of total expenditure					
Government	64.3	66.5	94.6	51.7	76.2
Local authorities	24.6	12.1	5.4	39.5	13.3
Private	11.1	21.4	.	7.8 ¹	10.5
Annual rate of increase, 1952-62 ² in percentage					
Total expenditure	39.0	25.9	33.0	30.2	31.7
Government sources	40.2	29.3	52.0	33.8	40.9
Public sources ³	46.9	35.6	53.9	68.1	46.9
Local sources ⁴	37.1	20.5	(-)-4.7	37.0	16.4
Percentage of private expenditure of total local resources					
1952	63.0	97.2	95.0	100.0	91.8
1962	31.0	63.9	0.0	16.0	44.2

1. Cost for the operation of private schools not included in the free primary education scheme

2. For Lagos, the rate refers to the period 1955-62

3. Aggregate of government and local authority sources

4. Aggregate of local authority and private sources

authorities 39.5 per cent. The local authority contribution exceeded the agreed share of 30 per cent only because the government was late in its payments, and the situation was later rectified. In the Northern and Eastern Regions, the regional governments contributed respectively 64.3 per cent and 66.5 per cent of total expenditure.

Except in Lagos, the contribution of local authorities depended greatly on the number of schools which were operated directly; in the North, therefore, this contribution is the highest with 24.6 per cent, while 12.1 per cent was contributed in the East and only 5.4 per cent in the West. Private contributions were highest in the East where the highest fees were charged.

The analysis of expenditure by government, public, and local sources shows that the participation by public sources increased at the highest rate. In fact, over a total rate of increase of 31.7 per cent, government sources showed an increase of 40.9 per cent, public sources an increase of 46.9 per cent, and local sources of only 16.4 per cent; and the same trend, more or less pronounced, is shown in the analysis by region.

One of the most important consequences of the introduction of the free primary-education system and of the control exercised over the imposition of fees in primary education is the decrease in the percentage of private sources over the total local financing. These in 1952 represented 91.8 per cent and by 1962 were down to only 44.2 per cent.

The financing of school building

Before and during World War II, primary-school building was entirely the responsibility of school proprietors and the necessary funds were mostly raised locally by the missionary societies or by the communities (which in many cases also provided unpaid local labour for the construction work). It was only in 1946 that the central government began to finance in part some school buildings through a 'special purposes' grant, which was continued under the Phillipson system. With the introduction of the free-primary-education schemes, the regional governments assumed a much larger responsibility and in the Western Region and the Federal Territory, they practically financed new constructions at 100 per cent of cost under pre-established building programmes.

During the period under review, government financing of primary-school buildings was distributed among the regions as shown in Table 9.

TABLE 9. Government building grants for primary schools, 1952-62

Region	In £ thousand	Region	In £ thousand
Northern	2 600.6	Western	7 572.3
Eastern	491.9	Lagos	2 505.8
		Federation	13 170.6

The federal government undertook in Lagos an eight-year school-building programme, 1955-62, which provided for the financing of building and equipment and the acquisition of sites for schools and site works. Under this development programme, all schools, including primary, were financed at 100 per cent of their cost after approval of the projects. The Western Region, from 1955, also undertook a primary-school-building programme based on fixed grants at the rate of £200 per class-room. In the North, primary-school-building grants covered the total cost of some native authority schools operating in poor and under-developed areas, and of almost all rural primary schools, while partial financing was provided for the remaining ones. The Eastern Region government did not finance the construction of primary schools and funds had to be raised from local sources. In 1956, however,

TABLE 10. Total capital expenditure for primary schools from internal sources of financing, 1952-62

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total expenditure (in £ million)	3.4	4.5	7.6	2.5	18.0
By sources of financing (in percentage)					
Government	76.5	11.0	100.0	100.0	73.5
Local authorities	12.5	12.0			5.0
Private	11.0	77.0			21.5

a grant of £500,000 was provided for the building of the local authorities' UPE schools already mentioned, which were financed at the somewhat inadequate rate of £300 per school. Public local sources provided about another £500,000 in the following years and the remaining costs were financed from private and community funds.

A rough estimate of total capital expenditure by sources of financing during the period 1952-62 is given in Table 10.

As stated earlier, no new government primary schools were built during the period under review except for the Kaduna Capital School, which cost over £180,000, and the Lagos Demonstration School, whose building costs could not be separated from those of the teacher-training college to which the school is attached. In the East, the regional government spent £62,600 for the building of handicraft and domestic science centres serving as training institutions for primary school pupils.

Unit costs and cost analysis

Primary education recurrent costs showed marked differences among the regions and notable changes over the period under review.

As staff salaries are estimated to absorb as much as 80 per cent to 95 per cent of total recurrent costs, obviously the most important variables are represented by factors such as changes in the salary scales, in the teachers' qualifications, and in the pupil/teacher ratio. Table 11 shows the recurrent unit costs in the years 1952 and 1962 together with the changes that affected some correlated factors.

There were two nation-wide salary revisions during the period under review, the first between 1955 and 1957 and the second in 1959/60. These revisions were effected by each region independently and resulted in differing salary scales, the lowest being that of the Eastern Region and the highest in Lagos. In the North, at the beginning of the period, different salary scales were applied for native authority and voluntary agency teachers, but these were unified after 1956. Although it is not possible to

TABLE 1. Recurrent unit costs for primary education and correlated factors

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Cost per pupil (in pounds)					
1952	4.46	3.36	3.70	5.80 ¹	3.74
1962	7.42	4.93	5.73	9.86	5.73
Annual rate of increase, 1952-62 ² (percentage)					
In unit costs	6.6	4.7	5.5	7.0	5.3
In total expenditure	39.0	25.9	33.0	30.2	31.7
In total enrolment	19.5	14.4	17.7	23.7	17.2
Grade II and III teachers as compared with total teaching staff (percentage)					
1956	27.4	28.6	16.9	45.4 ³	23.6
1962	52.0	47.7	33.3	60.9	42.8
Pupils per teacher					
1956	26.6	31.1	28.8	28.5 ³	29.5
1962	31.1	28.4	27.6	32.7	28.5

1. In 1955

2. For Lagos, annual rate of increase 1955-62

3. In 1958

give an average increase for the over-all salary bill, generally the scales were increased by between 12 per cent and 18 per cent on both occasions and the over-all increase was slightly higher in 1959/60.

The cost per pupil increased in the period under review from £3.74 to £5.73, at the annual rate of 5.3 per cent. In Lagos, where teachers' salaries were higher than in the regions, the cost per pupil was £9.86 in 1962 and the annual rate of increase over the period 1955/62 of 7.0 per cent. In the North, the cost per pupil increased at the annual rate of 6.6 per cent up to £7.42, while in the West and East both unit costs and annual rate of increase were lower.

Teachers' qualifications were everywhere a factor which worked towards increasing the unit costs, but were a larger factor in the North and in the Federal Territory than in the southern regions.

The pupil/teacher ratio worked towards increasing unit costs in the East and West and towards decreasing unit costs in the North and Lagos.

A detailed analysis of unit recurrent costs per pupil is not available for the whole Federation nor for the regions separately. In Lagos, recurrent unit costs in 1962 were composed as in Table 12.

Though we are unable to supply the same analysis for the regions, there is no doubt that especially in the south the percentage of teachers' salaries on total costs is even higher and in certain rural areas can reach 95 per cent.

There is no adequate information which can be used for the calculation of

TABLE 12. Analysis of recurrent unit costs in Lagos primary schools, 1962

Item of expenditure	Cost per pupil	Percentage
	£ s. d.	
Staff salaries	7 19 0	80.6
Other expenses		
Wages and administration	0 1 10	0.9
Equipment and furniture	0 10 2	5.7
Upkeep and maintenance	0 4 7	1.8
Books	0 19 3	9.8
Stationery	0 2 5	1.2
	1 18 3	19.4
Total	9 17 3	100.0

capital unit costs or costs of providing new school places. Capital expenditure, as seen before, depended largely on the funds made available by the federal and regional governments. A rough estimate relating to the year 1962 shows great differences in the regional averages, but it is impossible to establish how much of such differences is due to pure costs and how much to quality of buildings. The system of financing was certainly an element which influenced both the level of costs and the quality of buildings, as the governments in many cases established a flat rate for the financing of school buildings which was sometimes kept unchanged over the whole period under review. The estimates of the cost of a new class-room in 1962, shown in Table 13, give an idea of the differences existing among the various regions.

Unfortunately, no analysis of these costs is possible. What can be said is that in the Western and Eastern Regions, locally produced material and local labour are largely used. In Lagos, acquisition of sites and site works usually account for over 20 per cent. of the total cost. In the Northern Region, the cost of building material, which is not produced locally, is usually higher, and other costs, such as transport and professional fees, take a good share of the total.

TABLE 13. Average cost per class-room in primary schools, 1962 (in pounds)

Region	Cost per class-room	Region	Cost per class-room
Northern	550	Western	250
Eastern	200	Lagos	1700

3 Secondary education

The organization of secondary education

At the beginning of the period under review, Nigeria had practically only one type of secondary general education, represented by the relatively few secondary grammar schools conducting a six-year course similar to those in the United Kingdom and leading to the Cambridge school certificate. Pupils were admitted after completion of the primary course—after middle class II in the North—on the basis of an entrance examination. This type of education was a prerequisite for entering the Nigerian civil service and the University College, Ibadan, or the Nigerian College of Arts, Science and Technology (NCAST), then just established.

In order to meet the standards required for university entrance, an increasing number of grammar schools added a sixth form consisting of two years' post-school certificate work and leading to the Cambridge higher certificate. With the constitution of the West African examinations council, of which Nigeria was a member, the Cambridge school certificate became the West African school certificate and gradually the six-year course was reduced to five.

Although this type of school remains the basic form of secondary general education in Nigeria, with the expansion of the primary school system a number of other types of institutions were established, mainly to satisfy the increasing demand for further education from those who did not have the opportunity or the means to enter the secondary grammar schools. We have already mentioned the secondary modern schools in the West, initiated in 1955 following the reorganization and expansion of the primary school system, while in the North some middle schools were developing into full-fledged secondary schools. The fewer opportunities offered to girls for a full secondary education gave origin in the East and Lagos to the girls' modern schools, where a two-year post-primary education is given in domestic science and home economics subjects. This type of school gradually replaced the so-called modern classes attached to some urban primary schools.

The rapid economic development which took place, especially in the larger population centres, prompted the creation of another type of secondary education which is generally designated as secondary commercial though such schools adopt various names such as commercial institutes, schools for secretaryship and accountancy. These schools give courses varying from two to five years' duration and prepare pupils for a number of certificates of the Royal Society of Arts, for the Pitman's and other commercial examinations.

When, with the attainment of independence, the Nigerian authorities began to consider the problem of manpower needs and the desirability of having a secondary school system more closely related to such needs, a nation-wide review of the secondary school system was undertaken—arising from both direct initiative and external advice. Sixth form work in science subjects was given top priority together with the introduction of technical streams at the school-certificate level. The governments, with external assistance, established comprehensive secondary schools (Aiyetoro and Port Harcourt) and one full secondary technical school (Port Harcourt). At the end of the period under review, however, these initiatives had just begun, but there is no doubt that in the future they will multiply and perhaps change considerably the secondary school system as it appears today.

Public and private sectors

Secondary education is divided into a government sector, an assisted sector, and a non-assisted sector. The government sector, unlike the situation obtaining in primary education, constituted an important part of the whole system and after independence was considerably enlarged. It included a number of secondary grammar schools and those schools, already mentioned, which were established as experiments. The assisted sector comprised that part of the local government and private sectors receiving assistance through the grants-in-aid system. The remaining schools constituted the non-assisted sector.

The assisted sector included grammar schools, which were in the majority, some commercial schools in the West and Lagos, and the girls' modern schools in the East and Lagos.

The non-assisted sector included all modern schools in the West, a good number of grammar schools and almost all commercial schools.¹ The case of the secondary modern schools in the West deserves an explanation. These schools were established

1. Apart from the secondary modern schools in the West, this sector largely owes its existence and relative prosperity to the number of external private examinations which have been introduced in the country and have received government recognition, the most prominent being the general certificate of education examination held by the West African examinations council.

by government decision and recognized as part of the formal school system, with government-established programmes and government-controlled final examinations. At their inception, the regional government gave an encouraging assistance in the form of grants for equipment and other expenses, and advised the local authorities to do the same in respect of the schools in their areas, most of which were operated by voluntary agencies. From 1959, the regional government assistance ceased completely and the schools mostly depended on revenue from fees, but the teaching staff continued to be paid according to the approved salary scales established for voluntary agency teachers and the schools remained subject to government control.

The system of financing

Government schools were under the various ministries of education which were responsible for their operation and maintenance. The teaching staff was on government salary scales; and fees were paid into government revenue. Government schools established as external aid projects were operated on the basis of special agreements and the expenditure charged to the government was included in the regular budget estimates.

The assisted sector was partly financed through the grants-in-aid system, while the remaining expenditure was financed by private sources represented almost exclusively by fees. Schools operated by local government, however, were administered in the same way as government schools and fees were paid into revenue, but teachers received their salary according to the scales established by the government for voluntary agency teachers. Some schools owned by the local government authorities but operated by voluntary agencies under an agreement were administered in the same way as assisted voluntary agency schools.

Non-assisted schools were completely financed through fees and teachers were paid, on contract, salaries which were fixed by the school managers.

The system of grants-in-aid proposed by Sir Sydney Phillipson in 1948 was adopted by the central government as from 1 January 1949 and continued in force throughout the country until 1954 when the regions attained autonomy in education matters. The grants established in the Phillipson system covered payment of the teaching staff salaries and allowances, plus a sum for other expenses at the rate of £3 per enrolled pupil, less an assumed local contribution of £6 multiplied by twenty-five for each class. Although the basic principles of the grants-in-aid regulations remained the same after the regions assumed responsibility for education, the governments often revised the system of assessing the grants by altering the capitation sum quota for other expenses and the rate of assumed local contributions.

In the West, for instance, the assumed local contribution rate was raised to £9 in 1954, and to £15 for boys and £10 for girls in 1957, while the capitation sum for other expenses was raised to a maximum of £6. In the East, by 1962, the assumed local contribution rate had gone up to £18—but only £6 for sixth form classes—and the capitation sum for other expenses was kept unchanged except for an additional £1.5s. which was paid in respect of technical streams. The Northern Nigerian government did not change the Phillipson assessments for the voluntary agency schools but practically removed the native authority schools from the system. These were not assessed for local contributions and the sum for other expenses was paid at the rate of £10 per day pupil and £32 per boarder. The governments thus used the grants-in-aid regulations both for the realization of economies and for fostering their particular policies.

The two nation-wide salary revisions for teachers in assisted schools already mentioned in respect of primary-school teachers applied to secondary-school teachers as well.

The development of secondary education

The mainstream of development in secondary education in Nigeria continues to be the expansion of secondary grammar schools. Although this type of institution has often been criticized for not corresponding to the needs of Nigeria's future modernized economy, experiments to supplement or to replace it have been limited by financial and other resources and have not yet provided any substitute. In the meantime, modifications have been introduced to adapt the secondary grammar school to the changing scene.

Table 14 gives the main characteristics of secondary grammar school development in Nigeria during the period under review.

Total enrolment in 1962 came to 76,600 pupils, including those in the sixth form classes. This figure was reached by an annual rate of increase of 25.5 per cent over the period 1955-62. The highest rate of increase was achieved by the Western Region with 30.7 per cent, followed by the Northern Region with 28.5 per cent and the Eastern Region with 23.0 per cent.

The government sector in 1962 still was limited to 4.6 per cent and 3.1 per cent in the East and West respectively where most of the expansion took place in the assisted and non-assisted sectors. In the North, the government sector represented 13.9 per cent of total enrolment, but the assisted sector included all the provincial secondary schools which, though listed as local government schools, were practically financed and controlled by the regional authorities. If we include these schools, the public sector represents 54.3 per cent of total enrolments. The non-assisted sector was mainly situated in the larger population centres, as has already

TABLE 14. Main characteristics of the development of secondary grammar schools, 1955-62

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total enrolments, 1962 (thousand)	8.0	27.6	34.5	6.5	75.6
Annual rate of increase, 1955-62 (percentage)	28.5	23.0	30.7	11.1 ¹	25.5 ²
Enrolments, by sectors, 1962 (percentage)					
Government sector	13.9	4.6	3.1	16.5	5.9
Assisted sector	84.6	75.6	82.3	55.4	77.8
Non-assisted sector	1.5	19.8	14.6	28.1	16.3
Teaching staff, 1962	484	1 780	1 865	431	4 560
Pupils per teacher, 1962	16.5	15.5	18.5	15.2	16.8
Percentage of graduate teachers					
In 1956	39.5	30.7	31.9	34.1 ³	32.6 ³
In 1962	66.5	44.8	43.2	45.7	46.5
Percentage of expatriate teachers, 1962	61.0	28.4	22.2	24.1	28.9

1. Government and assisted sectors only

2. Excluding Lagos

3. In 1958

been mentioned, and this explains the high percentage found in Lagos township of almost one-third (28.1 per cent) of total enrolments.

Usually secondary grammar school streams began with an intake of thirty to thirty-five pupils, which in the higher classes fell to twenty-five to thirty and in the sixth form to fifteen to twenty. The low teacher/pupil ratio, which for the Federation was 1:16.8, was due mainly to the small size of the schools, usually having one stream only, resulting in an under-utilization of the teaching staff.

The number of teachers in secondary grammar schools who were university graduates increased markedly between 1956 and 1962 from 32.6 per cent to 46.5 per cent of the over-all teaching staff on a national scale. As all expatriate teachers were

TABLE 15. Secondary school enrolments, by type of institution, 1962 (in thousands)

Type of institution	1956	1962	Type of institution	1956	1962
Secondary grammar ¹	26.8	76.6	Girls' secondary modern ³	...	9.6
Secondary modern ²	12.8	110.3	Secondary commercial ³	2.9 ⁴	7.0
			Total	42.5	195.5

1. The figures for the Western Region include secondary commercial schools

2. In Western Region

3. In Eastern Region and Lagos

4. In 1958

graduates, there is a close correlation between the percentage of such teachers and the percentage of all graduate staff.

In order to give an idea of the quantitative importance of secondary grammar schools within secondary education as a whole, Table 15 shows the over-all enrolments by type of institution.

Recurrent expenditure

As stated in the previous section, most of the government-owned secondary schools were secondary grammar schools with the sixth form extension. Most schools offered boarding facilities, though day pupils, especially in the South, were also admitted. In the South, fees were charged but a good number of the students were on government scholarships and fee remission was a common practice. The teaching staff qualifications were usually of a good or very good standard as the posts were coveted for the higher salaries of civil service scales. These schools, in addition, employed a high number of expatriate staff. The regional and federal governments generally maintained their schools as a show-case of the regions' achievements, and high standard buildings and facilities, such as halls, libraries, laboratories, playgrounds, were usually provided. Obviously the operation and maintenance costs were high.

The assisted sector presented widely varying standards. Much depended on the circumstances of the establishment of the schools and on the ability and possibilities of their proprietors. Institutions that could compare favourably with their government counterparts were few, but some of those run by the richest voluntary agencies were kept at a competing standard. The cost of these schools was lower than that of government institutions and their revenue was limited by the fees they could charge according to standards offered and the recognition attained.

The non-assisted sector on average was of very poor standard. Usually more pupils than the school could possibly handle were accepted and the drop-out rates were appallingly high.

Table 16 shows the main characteristics of the financing of secondary schools (with the exclusion of the Western Region secondary modern schools).

In 1962, the over-all expenditure had reached the level of slightly over £6 million. This represented an annual increase of 31.0 per cent between 1955 and 1962, with regional rates varying from 26.1 per cent in the North to 35.5 per cent in Lagos.

The public contribution, mainly represented by government sources, did not change significantly in percentage in the Federation as a whole, passing from 53.2 per cent in 1955 to 54.4 per cent in 1962. In the North, however, where the regional government gave almost total financial support to the provincial schools, this percentage rose from 69.0 per cent to 79.1 per cent over the same period.

TABLE 16. Recurrent expenditure for secondary schools, 1955-62, and main characteristics

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total recurrent expenditure, 1962 (£ thousand)	1 118.9	1 719.5	2 400.3	785.6	6 024.3
From public sources (percentage)					
In 1955	69.0	44.8	53.3	45.8	53.2
In 1962	79.1	46.9	50.4	48.2	54.4
Government recurrent grants (£ thousand)					
In 1955	97.1	181.2	241.2	46.8	566.3
In 1962	459.0	543.4	938.3	209.9	2 150.6
Annual rate of increase, 1955-62 (percentage)					
In total expenditure	26.1	29.9	33.2	35.5	31.0
In government grants	53.2	28.6	41.3	49.9	40.0
In total enrolment	28.5	23.0	30.7	11.1 ¹	25.5

1. Government and assisted sectors only

Government grants to the assisted sector increased at a higher rate than total expenditure. In the North, the annual rate of increase between 1955 and 1962 was 53.2 per cent, the highest in the Federation; in Lagos the increase was of 49.9 per cent, due to higher salaries received by voluntary agency teachers; in the West 41.3 per cent; and in the East, where salaries were the lowest and the assumed local contribution quota the highest, the increase was only 28.6 per cent.

Capital expenditure

All governments financed secondary school building not only through the grants-in-aid system—the already mentioned 'special purposes' grants—but also and mainly through building grants from the development funds. From 1952 to 1956, however, the main financing of both government and voluntary agency secondary schools came from the grants given under the Colonial Development and Welfare Scheme. Though not many new government secondary schools were built during the period under review, almost all the existing ones were enlarged or transferred from temporary to permanent accommodation.

Table 17 gives the total amount of government capital expenditure and financing between 1952 and 1962.

Government grants to the assisted sector did not cover the full cost of new buildings, except for the provincial schools in the North and for some secondary schools in Lagos. Any estimate, however, of the contribution of the voluntary agencies towards building costs would be too hazardous. Usually an initial capital

TABLE 17. Government direct expenditure and building grants for secondary education, 1952-62 (in £ million)

Region	Direct expenditure	Building grants	Total
Northern	1 629.2 ¹	572.7	2 201.9
Eastern	422.4	672.2	1 094.6
Western	395.2	1 564.2	1 959.4
Lagos	420.8	726.9	1 147.7
All of Nigeria	2 867.6	3 536.0	6 403.6

1. Including the provincial secondary schools

was hastily collected in order to begin a secondary course. This was invariably spent to arrange or hire a temporary accommodation of a sort and immediately after the government approval, a request for a grant was put forth. This sometimes came fairly soon, as was the case generally in Lagos, or it was delayed for years and given in instalments, as was the usual practice in the regions.

To establish a relationship between grants and number of new schools would have no meaning and the only estimate that can be advanced is that certainly government grants were the major source of financing of school buildings constructed and completed during the period under review.

Unit costs and cost analysis

All government grammar schools were boarding institutions, though day pupils were also admitted. Assisted grammar schools usually offered boarding places for a good part of the student body, but those which were co-educational accepted as boarders only one of the sexes. A minority were day schools only. Non-assisted schools admitted only day pupil and boarding facilities were the exception.

The average cost per pupil was influenced considerably by the proportion of boarders, as boarding fees ranged between £22 and £30 per pupil and were rarely remitted.

Table 18 gives the main characteristics of the average cost per pupil in secondary grammar schools and some correlated factors.

The average cost per pupil, as can be seen, was much higher in government schools than in assisted schools. As explained, the government schools all had the sixth form extension; the majority of their teachers were graduates; and the whole staff was on government salary scales which were not only higher but included a number of allowances not granted to voluntary agency teachers, the most important being the basic automobile allowance.

The average government grant per assisted school pupil was highest in the

TABLE 18. Average cost per pupil in secondary grammar schools, and related factors

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Average cost per pupil, 1962					
Government schools (£)	160 ¹	172	216	185	173
Assisted schools (£)	115	60	70	113	74
Average government grant per assisted pupil pupil (£)					
In 1957	64	26	25	40	31
In 1962	68	26	33	58	37
Pupils per teacher, 1962					
Government schools	16.8 ¹	13.3	14.3	12.6 ²	15.3
Assisted schools	16.3	15.4	15.8	14.1	15.6
Graduate teachers, 1962 (percentage)					
Government schools	62.9	87.1	...	...	...
Assisted schools	71.4	45.8	...	...	...

1. Government and provincial secondary schools

2. King's and Queen's Colleges only

North, being £68 in 1962, followed by Lagos with £58, the West with £33 and the East with £26. Even here the relationship between teaching staff qualifications and salaries and government grants is evident.

The main items of recurrent cost for secondary education in government institutions are represented by (a) teachers salaries, (b) maintenance, equipment and stores, and (c) subsistence of students, including boarding. These three items in 1962 amounted to percentages on total expenditure indicated in Table 19.

Personal emoluments represent 54.1 per cent of total expenditure in the West and 58.9 per cent in the East and Lagos, but in the North they reach a much higher percentage: 79.1. The other three items present wide differences which are not easy to explain. A number of different factors could be responsible for these differences, including no doubt the non-comparability of some of the items shown in the budgets.

TABLE 19. Percentage cost analysis of recurrent expenditure in government secondary schools, 1962

Item of expenditure	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Personal emoluments	79.1	58.9	54.1	58.9	65.9
Subsistence of students	9.8	14.0	22.9	26.8	16.6
Maintenance, equipment and stores	3.5	17.6	6.3	10.8	8.3
Other	7.6	9.5	16.7	3.5	9.2
Total	100.0	100.0	100.0	100.0	100.0

TABLE 20. Revenue and expenditure of assisted secondary schools in Lagos, 1963

	In £ thousand	Percentage
<i>Source of revenue</i>		
Government grant	195.0	50.4
Fees: tuition	129.1	33.4
other	57.3	14.8
Other	5.6	1.4
Total	387.0	100.0
<i>Item of expenditure</i>		
Teachers' salaries	204.8	52.9
Administrative expenses	57.9	15.0
Instructional expenses	13.1	3.5
Other recurrent costs	56.2	14.5
Capital expenditure	39.6	10.2
(Surplus/deficit)	(+)15.4	(+)3.9
Total	387.0	100.0

It is not possible to give the same breakdown of the assisted sector for the Federation as a whole. However, information relating to the school year 1963 is available for nineteen assisted grammar schools in Lagos, which represented all but two of the assisted schools. Revenue and expenditure in these schools were distributed as shown in Table 20.

Government grants represented almost the entire amount paid for teachers' salaries and covered 50.4 per cent of total receipts, while 48.2 per cent was represented by fees and 1.4 per cent by other receipts, namely mission grants and other extraordinary income. Teachers' salaries amounted to 52.9 per cent of total expenditure and another 15.0 per cent was spent for administration, while instructional expenses amounted to only 3.5 per cent, and other recurrent payments mainly for students' maintenance, covered 14.5 per cent.

If we compare this latter percentage with the 26.8 per cent of government schools, as noted in Table 19, the higher cost of students' subsistence in government schools is apparent.

It is interesting to observe that the cost per pupil in Lagos assisted schools ranged from as low as £65 to as high as £145.

Capital expenditure, as observed, was mainly financed from government sources, though at different rates in the various regions. Because of the reasons already mentioned, an average cost of secondary-school building or of student place cannot be calculated or even roughly estimated.

4 Teacher training

The organization of teacher training

Teacher-training institutions in Nigeria were first established by the individual missionary societies to serve the growing number of primary schools under their management. Only in 1926 did the colonial government introduce a register of teachers and teachers' standards.

The required standards for teaching in primary schools in 1952 were as follows:

1. Senior primary schools: higher elementary teachers' certificate or Grade II. This required (a) two-year course after Cambridge school certificate, or (b) two-year course after elementary teachers' certificate, or (c) four-year course after standard VI.
2. Junior primary schools: elementary teachers' certificate or Grade III. This required a two-year course after standard VI.

Secondary-school teachers were expected to possess a degree, but lower certificates such as the Yaba diploma and equivalent qualifications were accepted.

In order to maintain as far as possible certain standards, regulations were also introduced as to the proportion of fully qualified teachers for assisted schools. For instance, secondary schools were required to have one graduate teacher for every ninety pupils; senior primary, one-third to one-half of teachers with higher teachers' certificate; and junior primary, one-fifth to one-fourth with elementary teachers' certificate. These regulations, however, could rarely be met and were never applied as a pre-condition for granting assistance.

In the South, teacher-training institutions conformed to the above scheme and offered the two-year course leading to the elementary certificate, or both the two-year and four-year courses up to the higher certificate, or only the latter. Some colleges offered also one-year preliminary training for qualification to enter the lower two-year course for those who had failed to pass the entrance test.

In the North, there was in addition a lower qualification than the elementary

certificate, called Grade IV or vernacular, which was obtained in a two- to four-year course after completion of junior primary school; also, the elementary certificate required a three-year course instead of two.

During the period under review, the regions established a one-year course in rural education to be entered after achievement of the higher elementary certificates. The rural education diploma, together with a number of good reports as teacher, entitled the holder to receive the Grade I teachers' certificate. There was one rural education centre in each region, and towards the end of the period under review a second was established in the North.

In the East and in Lagos, the organization of the teacher-training system continued unchanged until 1962. In the West (when the secondary modern schools began to turn out large numbers who had finished the course), a pilot scheme based on a three-year course for higher elementary certificate was introduced, to be entered after completion of secondary modern schooling and to replace the four-year course. In the North, the Grade IV certificate was discontinued in 1958/59.

At the end of the period under review, following a recommendation contained in the Ashby report,¹ four advanced teacher-training colleges were established, one in each region and one in the Federal Territory, offering a three-year course to prospective secondary school teachers of the two lowest forms. Grade II teachers and secondary school graduates were admitted as trainees. Two of these institutions, in the North and the Federal Territory, were opened in 1962.

Though the figures shown in this analysis are not affected, it is relevant to an appraisal of the contemporary scene that, starting from 1964, the elementary teachers' certificate courses were discontinued and all teacher-training colleges which provided preparation only for this certificate were closed or merged with the higher segment.

The government and assisted sectors

As the administration of the primary-school system was broadly divided among the main voluntary agencies which controlled the schools, necessarily the teacher-training institutions followed the same pattern and, rather than as part of a national system, were established as compartmental supply lines of the voluntary agencies' needs. At the beginning of the period under review, most of the teacher-training institutions in the South belonged to the larger missions and only a few—three in

1. *Investment in Education*, a report prepared by the Commission on Post-School Certificate and Higher Education in Nigeria, 1960, of which Sir Eric Ashby was the chairman. Lagos, Federal Government Printer, 1960.

the West and two in the East out of about seventy-five centres—were government-owned. In the North, obviously the situation was different and eleven institutions out of twenty-two were government colleges. Local authorities had none except the one at Okene in the North which in 1956 was taken over by the regional government.

The first teacher-training institutions operated by local authorities were started in the Western Region between 1953 and 1954 with the imminent introduction of free primary education. With government help, sixteen centres were established in the various provinces, all for the lower certificate. The same occurred in the East between 1956 and 1957. In the North, the regional government chose to take full responsibility for the supply of teachers in native authority schools and all public teacher-training institutions were government-operated, though situated in the various provinces.

Towards the end of the period, the situation had developed as follows: (a) in the North, the government and the assisted sectors were almost balanced and the non-assisted sector was represented by one institution only; (b) in the South, the government sector had developed modestly as compared with the assisted sector, a sizeable contingent of local authority schools formed part of the assisted sector, and all institutions were grant-aided except for a small number of preliminary courses in the East.

The system of financing

Though the training of teachers was mainly carried out by the voluntary agencies in the southern regions and about half of the teacher-training institutions in the North were operated by them, the governments nonetheless assumed a large financial responsibility. Except for the one non-assisted institution in the North, established in 1961, mentioned above, and the few preliminary centres in the East, all institutions were supported by government grants. The staff salaries were paid in full and no assumed local contribution was deducted. In addition, the governments paid for each trainee a sum corresponding to the tuition fees and another sum for books.

In the Phillipson grants-in-aid regulations which were in force at the beginning of the period under review, the quota for each trainee was established at £18 for tuition expenses and £2 for books. This rate remained unchanged in the East, but in the West the tuition expenses quota was raised to £22. In the North, the rate for tuition was brought to £30 and for books to £3 and trainees in Grade II maintained their previous salaries. In Lagos, the federal government supported the three assisted training colleges and their trainees at 100 per cent of their expenses.

Teachers who were already in service when they entered a training institution

in order to upgrade their qualification usually retained part of their salaries in a proportion measured to their immediate family responsibilities. The federal and regional governments also paid the voluntary agencies the cost of training secondary school teachers for their own needs in Nigerian institutions or abroad.

As a norm, fees were not to be charged in teacher-training institutions. However, the school managers, especially in the East and West, charged fees for boarding and other expenses, but the total amount of fees paid was much lower than in secondary schools and actually in many cases such fees were refunded or prepaid by the government in the form of 'students' personal allowances'.

There were two ways, thus, by which costs were borne directly or indirectly by government sources—one through the grants-in-aid system and the other through the provisions for teachers-in-training.

The development of teacher training

The great expansion of teacher-training enrolments took place between 1954 and 1958 in the East and West. During this period, enrolments rose—in round figures—from 5,000 to 11,000 in the West and from 3,500 to 11,000 in the East. In the following years there was no further increase worthy of mention. In the North, enrolments grew steadily after 1955 with a mounting rate of increase between 1959 and 1962. In 1955, there were about 2,000 trainees, and this figure increased to 3,200 in 1959 and to over 6,000 in 1962.

In Lagos, the federal government established the first teacher-training college in 1954 as a federal institution and then financed the building of three other colleges, one for each denomination—Roman Catholic, joint-Protestant, and Moslem—between 1956 and 1959. Table 21 gives the main characteristics of teacher-training expansion in the period under review.

Table 21 shows clearly the balance between government and assisted sectors in the North, while in the South the assisted sector represented almost the total.

Enrolment in lower and higher qualifications (grades) does not seem to show significant improvement in the North between 1956 and 1962, but during that time all Grade IV colleges were closed or replaced by Grade III ones. More visible is the progress made in the southern regions where the percentage of Grade II and higher enrolments rose in the East from 25.3 per cent in 1956 to 40.6 per cent in 1962, and in the West from 34.5 per cent to 42.2 per cent.

The pupil/teacher ratio presents marked differences between government and assisted sectors in the southern regions but less in the North. The assisted sector shows more favourable ratios except in Lagos where the opposite is true.

Graduate teachers are relatively more where the number of expatriate staff is higher, as in the North and Lagos. In the Federation as a whole between 1956 and

TABLE 21. Main characteristics of teacher-training development

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total enrolments, 1962 (thousand)	6.1	11.1	12.8	0.6	30.7
Enrolments, by sector, 1962 (percentage)					
Government sector	48.1	4.1	3.6	29.9	13.2
Assisted sector	50.1	95.9	96.4	70.1	86.4
Enrolments, by grade (percentage)					
In 1956: Grade III and lower	80.5	74.7	65.5	1	71.1
Grade II and higher	19.5	25.3	34.5	1	28.9
In 1962: Grade III and lower	80.2	59.4	57.8	70.1	63.1
Grade II and higher	19.8	40.6	42.2	29.9	36.9
Pupils per teacher, 1962					
Government sector	14.4	10.2	10.1	12.6	13.1
Assisted sector	15.1	14.8	16.9	9.9	15.6
Percentage of graduate teachers					
In 1956	32.3	18.2	15.5	28.6 ²	19.3 ³
In 1962	35.1	22.7	16.3	32.4	23.3
Percentage of expatriate teachers, 1962	34.2	9.8	8.6	22.5	15.0

1. Only one government teachers' college; enrolment figures not available

2. In 1958

3. Excluding Lagos

1962 the percentage of graduate teachers improved only by 4 per cent, rising from 19.3 per cent to 23.3 per cent.

Total recurrent expenditure and sources of financing

From what has been said above, it is clear that most of the financing of teacher training came from government sources, through the grants-in-aid system or otherwise.

Table 22 shows the main characteristics of the expenditure trend and related factors.

Total expenditure by 1962 had reached nearly £3.5 million, of which 93.0 per cent was financed from public sources. Public financing was total in Lagos and nearly total in the North (98.9 per cent), while in the East and West it was respectively 88.6 per cent and 90.1 per cent. Changes in the rate of public financing between 1955 and 1962 were most marked in the North—from 68.5 per cent to 98.9 per cent—and less in the West, from 80.5 per cent to 90.1 per cent, while in the East the change was insignificant.

Government grants were the main source of financing of the assisted sector and rose from £1.64 million in 1955 to £2.24 million in 1962.

TABLE 22. Total recurrent expenditure and some related factors, 1955-62

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
Total expenditure, 1962 (£ thousand)	1 151.8	912.5	1 222.7	138.5	3 425.5
Financing from public sources (percentage)					
In 1955	68.5	88.1	80.5	100.0	83.8
In 1962	98.9	88.6	90.1	100.0	93.0
Government recurrent grants (£ thousand)					
In 1955	81.0	231.2	330.1		642.3
In 1962 ²	595.3	699.3	926.4	52.2	2 243.2
Annual rate of increase 1955-62 (percentage)					
In total expenditure	35.6	26.6	20.0	1	27.8
In government grants	90.7	27.1	25.8	1	35.5
In total enrolments	31.1	21.1 ¹	12.8	1	18.8

1. Not calculated for lack of a significant base

2. Estimated

The comparison between the annual rate of increase of total expenditure, government grants and enrolments shows that government grants rose at a higher rate than the two other indicators, mainly because of the impact on such expenditure of staff salary increases, but also of increased assistance to trainees, especially in the North.

Capital expenditure

Generally, buildings for teacher-training institutions were smaller than those housing secondary schools, especially in the assisted sector. In the Federation, the average number of pupils per teacher-training college in 1962 was 109, as compared with 169 for secondary schools. In the East, the average was as low as eighty-four trainees for each teachers' college.

The practice by the governments of making building grants was not dissimilar to that already described for secondary schools. The federal government paid all costs of the three assisted teacher-training colleges in Lagos while the regions limited their contribution to grants towards building costs.

As far as government building is concerned, the Northern regional government was the most active and practically the only one to erect new colleges—about eighteen in number; existing colleges were also expanded. The federal government built one college in Lagos between 1956 and 1957 and in 1961 began the construction of the Advanced Teacher Training College. The Eastern and Western governments did not build new institutions but, especially in the West, those already existing were improved and extended.

TABLE 23. Government direct expenditure and building grants for teacher-training institutions for the period 1952-62 (in £ thousand)

Region	Direct expenditure	Building grants	Region	Direct expenditure	Building grants
Northern	2 646.2	564.2	Western	325.8	1 051.6
Eastern	82.0	755.4	Lagos	482.4	157.4
			All of Nigeria	3 536.4	2 528.6

Table 23 gives the governments' direct expenditure and building grants in the period under review.

Over £2.6 million was spent in the North for government schools, while the other regional governments distributed a larger part of their capital expenditure for teacher-training institutions by means of grants. The federal government spent £35,846 for the government college in Surulere and £446,478 was spent for the Advanced Teacher Training College at the close of the financial year 1962/63.

Regional government grants, which were higher in the North and West than in the East, benefited almost all new institutions and a number of the existing ones. The federal government granted over £65,000 for the construction of the Rural Education Centre in Asaba, Western Nigeria,¹ before the regionalization of education administration in 1954, £30,000 for the construction of the Muslim Teachers' College, and another £35,000 for the two other voluntary agency institutions which were still in semi-permanent buildings.

Unit costs and cost analysis

Teacher-training unit costs, in addition to the usual components, included students' personal allowances which were charged on the government budgets and were usually part of the transfers by way of grants. The unit cost, therefore, does not represent only the cost of training but also the additional costs involved in the upgrading of teachers. Governments also made payments to students not already in the teaching profession but coming directly from school. For the advanced colleges, for example, this rate was established at £50 per annum because a lower rate might have discouraged the entry of secondary school graduates and governments were keen to have them. Unfortunately, we do not possess sufficient information to distinguish the amount paid as personal allowances from the total grant and it is not possible, therefore, to give unit costs limited to pure operation costs.

Table 24 shows the average grant per trainee paid by the regional and federal governments in 1957 and 1962.

1. Now in Midwestern Nigeria.

TABLE 24. Average grant per trainee in assisted schools, 1957 and 1962 (in pounds)

Region	1957	1962	Region	1957	1962
Northern	158	192	Western	50	75
Eastern	48	63	Lagos	126	126
			Federation	56 ¹	85

1. Excluding Lagos

If we compare the 1962 figures with those relating to the average cost per pupil in the same year in assisted secondary schools, as given in Table 18 (page 131), we notice that the pure grant in teacher-training institutions is in all regions higher than the total unit cost in secondary schools. As secondary schools had higher qualified teaching staff than teacher-training institutions, it is clear that the government grant to the latter did not cover pure operational costs alone. This, moreover, is evidenced by Table 25 showing the expenditure breakdown in the three assisted training colleges in Lagos for 1963.

As can be seen, students' maintenance including personal allowances accounted for 46.7 per cent of total expenditure and was higher than the total salary bill (35.0 per cent). This situation was similar in all regions, but less pronounced in the South where proportionately more trainees were coming directly from school, such as from modern schools in the West and straight from primary schools in the East.

Government institutions were operated at a much higher cost than the assisted schools, except in the North where the costs were more or less on the same level.

It is not possible to give significant figures for the government institutions in the South. From the budgets it appears that costs were very high and not consistently related to the number of pupils.

In 1962, there were five government-owned teacher-training colleges in each of the southern regions and two in Lagos including the Advanced Teacher Training College. In the East, the running costs of these institutions varied between £15,000 and £20,000, while in the West the cost was higher because of the existence of two

TABLE 25. Expenditure in Lagos-assisted teacher-training colleges, 1963 (in percentage)

Item of expenditure	College 1	College 2	College 3	All colleges
Teachers' salaries	38.2	35.6	30.3	35.0
Administrative expenses	6.0	8.4	10.7	8.2
Instructional expenses	13.1	5.5	5.0	8.3
Students' maintenance ¹	41.1	47.9	52.8	46.7
Capital expenditure	1.6	2.6	1.2	1.8
Total	100.0	100.0	100.0	100.0

1. Including personal allowances

advanced colleges—Olunloyo and Ransome-Kuti Colleges of Education. The Grade II government college in Lagos was operating at a cost of £21,000, and the Advanced Teacher Training College in its first five months, with only two Nigerians on the teaching staff and 143 trainees, recorded an expenditure of over £23,000 from the government budget only.

To the pure operational costs of the existing institutions the government budgets show additional direct expenditure chargeable to teacher training and directly related to the educational establishments. For instance, the federal government in 1962 had paid over £20,000 for such items as the United Kingdom-assisted vacation courses, reimbursement for teachers' courses, contribution to the International Labour Organization (ILO) pilot scheme for vocational teacher training. These expenditures alone would raise unit costs by over £100 per student and therefore the figure resulting by simple division cannot be taken as a workable indication.

5 Technical and vocational education

The organization

Technical and vocational education began as an organized sector of the educational system only in the late forties with the implementation of the programme outlined in the Ten-Year Development Plan, 1946-1955. Financed mainly from funds made available by the United Kingdom government under the Colonial Development and Welfare Scheme, this programme established varied institutions under government control. Three main types were created: technical institutes, trade centres, and handicraft centres.

Technical institutes offered courses of different lengths at the professional and sub-professional levels for full-time, part-time and evening students. These courses were organized into departments and covered both technical and commercial subjects. Entry qualifications varied according to the nature and level of the courses, but for professional courses, completion of secondary education at the ordinary level was a minimum requisite. Some institutions, however, offered plain secondary courses divided into technical and commercial streams and therefore covered the full range of post-primary education.

Trade centres offered only full-time residential courses in a number of trades and skills required by the main existing industries such as construction, furniture-making, metal-work and machine work, electricity, transport, and communications. The length of training varied from three to four years, according to the type of course, and the entry qualification required was the completion of primary school.

Handicraft centres provided manual training in metal-work and woodwork to primary school pupils who were attending the two top classes in the areas served by the centres. There was a rotation of pupils in each centre according to a schedule established at the beginning of the school year.

Training for women was provided at the level of handicraft and trade centres

by parallel institutions: domestic science centres and women's occupational training centres. In domestic science centres, girls attending the two top classes of primary schools were given training in cooking and other house-keeping techniques; while in women's occupational training centres, residential courses were offered in house-keeping, needlework and embroidery, as well as secretaryship and copy-typing.

The above system remained substantially unchanged during all of the period under review, with the exception that in the North craft schools were introduced around 1957. These schools were established on the pattern of the trade centres and until 1962 offered more or less the same type of training but at a lower level, with the purpose of supplying skilled artisans to the rural communities. From 1962, the curriculum was modified and the craft schools became a sort of post-primary intermediate course from which pupils entering the trade centres were recruited, while the trade centres became known as technical training schools.

Recently, a move to change the name and function of the existing trade centres and technical institutes has started throughout the country. Under the new policy, all trade centres will become technical schools and the technical institutes will be converted into technical colleges. It is not yet clear what the future development will bring in changes in the curricula and functions of the new institutions, but probably the technical colleges will limit their work to the professional ordinary and higher certificates, while the technical schools may absorb some of the functions now performed by the technical institutes at the sub-professional level and retain those already entrusted to them for the training of skilled workers. The entrance requirements for technical schools will likely be higher than the primary school certificate and will probably require a three-year secondary education.

The system of financing

As mentioned earlier, all technical and vocational education institutions were government establishments from their beginning. Only in the late 1950s did some industrial and commercial firms with extensive economic interests in the country open a few technical and trade schools, partly to produce skilled manpower for their own needs and partly to respond to the expectation that they would participate concretely in the general development effort. They continued, however, to send sponsored students to government institutions and in many cases preferred to make grants for the expansion of the government system rather than be involved directly in educational activities. The assisted sector included one school only and the non-assisted sector had set up very few institutions, inadequately staffed and equipped, hardly deserving the self-attributed names of technical schools and colleges.

As with other institutions, the governments financed technical and vocational schools under their control for both capital and recurrent expenditure. Income from fees was limited to a very few students sponsored by private firms or self-financing, and were mainly for part-time and evening courses. Most of the trade centres, including the craft schools in the North, were fee-free, and only in a few of them was a flat charge for boarding expenses imposed. Generally, students received not only free education but also reimbursement of travelling expenses, tool kits, uniforms and pocket money.

All technical and vocational institutions were built according to pre-established programmes and therefore the governments provided for the acquisition or release of sites; building and equipment of educational facilities including class-rooms, laboratories, and workshops; building and equipment of auxiliary facilities such as students' halls, teachers' quarters, recreation and sport facilities. On the recurrent side, the governments provided the expatriate and local staff, administrative expenses, students' maintenance allowances, and building maintenance.

Apart from the financing of the first nucleus of institutions built under the ten-year development plan, which was met from the Colonial Development and Welfare Scheme funds at the rate of 70 per cent of total capital and recurrent costs, most of the succeeding development was borne by the regional governments. External aid did contribute partly with the supply of expatriate teaching staff and topping up of their salaries. Some financial help towards the expansion of existing facilities has recently come from the major industrial and commercial firms operating in the country, but this does not affect the period under consideration.

The development

The Ten-Year Development Plan, 1946-1955, provided for the establishment of one technical institute in Lagos, and three trade centres, one in each region. The technical institute—the first in Nigeria—opened in Lagos in 1947, followed by the construction of the three regional trade centres. In 1951, the plan was revised and the trade centres in the North and in the East were enlarged into combined institutions, each including a technical institute.

In addition, two women's occupational training centres were built, one each in the two southern regions, while a programme was started for the building of handicraft and domestic science centres.

With the regionalization in 1954, the regions carried out programmes of expansion independently. In the North, twelve craft schools were built between 1956 and 1961. In the East, the technical institute and trade centre in Enugu were separated into two distinct institutions and the number of handicraft and domestic science centres was brought up to nine and seven respectively. In the West, which had lost

the Lagos technical institute and trade centre with the constitution of the federal territory, a programme was carried out between 1954 and 1962 for the construction of six trade centres and one technical college. The two women's occupational training centres in the South were transformed into women's teacher-training colleges but occupational training sections were maintained.

In 1962, the following institutions were in operation:

<i>North</i>	<i>East</i>	<i>West</i>	<i>Lagos</i>
One technical institute	One technical institute	One technical college	One technical institute
Three trade centres	One trade centre	Six trade centres	One trade centre
Twelve craft schools	Nine handicraft centres with twenty-eight workshops		Two handicraft centres
	Six domestic science centres		Two domestic science centres

In addition, there were vocational sections still operating in the two former women's occupational training centres in the East and West.

Table 26 gives the situation of enrolments and teaching staff for each type of institution in 1962.

TABLE 26. Enrolments and teachers in technical and vocational institutions, 1962

Type of institution	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
<i>Enrolments</i>					
Technical institutes					
Full-time	246	337	187	418	1 188
Part-time	.	350	.	1 042	1 402
Trade centres	704	185	773	538	2 200
Craft schools	1 568	.	.	.	1 568
WOTC's ¹	.	34	81	.	115
Handicraft centres	.	5 762	.	850 ²	6 512
Domestic science centres	.	2 499	.	400 ²	2 899
Total	2 518	9 167	1 041	3 248	15 974
<i>Teaching staff</i>					
Technical institutes ³	24	21	20	36	101
Trade centres	54	14	57	43	168
Craft schools	134	.	.	.	134
WOTC's ¹	.	2	2	.	4
Handicraft centres	.	28	.	3	31
Domestic science centres	.	14	.	2	16
Total	212	79	79	84	454

1. Women's occupational training centres

2. Estimated

3. Full-time only

The capital costs

Technical institutes and trade centres required high initial outlays for buildings, equipment and expensive machinery for the workshops and laboratories which were indispensable for teaching and practical work. The building and expansion of three technical institutes, of one non-residential technical college, of eleven trade centres and twelve craft schools involved an expenditure over the period under review of over £4 million, a breakdown for which is given in Table 27.

TABLE 27. Capital expenditure for technical institutes, trade centres and craft schools, 1952-62 (in £ thousand)

	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
<i>Ten-Year Development Plan 1946-1955 (1952-55 period)</i>					
Technical institutes and trade centres					
Building	244.2	91.3	21.8 ¹	138.6	495.9
Machinery and equipment	95.6	32.2	.	96.4	224.2
Total	339.8	123.5	21.8	235.0	720.1
<i>Expansion, alterations and additions (1956-62)</i>					
Technical institutes	156.4	53.3	206.5 ²	426.8	843.0
Trade centres	676.1	17.0	1 022.7	93.2	1 809.0
Craft schools	723.9	.	.	.	723.9
Total	1 556.4	70.3	1 229.2	520.0	3 375.9

1. Initial expenditure for trade centre, Sapele

2. Technical College, Ibadan (1957-62)

Table 27 does not show capital costs incurred for technical and vocational institutions since their beginning, as the expenditure in the previous period of the ten-year plan is not included. A rounded estimate of the cost of the various institutions up to 1962, including expansion and major alterations, shows that in the Northern Region the Technical Institute, Kaduna, involved an over-all capital cost of about £450,000, the three trade centres (Kano, Bukuru and Ilorin) about £250,000 each, and the twelve craft schools about £60,000 each. In the East, the combined institution formed of a technical institute and a trade centre involved a capital expenditure of about £250,000, including the cost of their separation carried out in 1959/60. In the West, the non-residential technical college built in Ibadan, which began in 1957, had cost £206,000 by the end of 1962, while the six trade centres, opened in 1954, had cost an average sum of £170,000 each, of which £35,000 was for machinery and equipment. In Lagos, the Yaba Technical Institute involved a capital expenditure of over £700,000 (including £320,000 spent for the college of technology) and the trade centre of about £230,000.

The recurrent costs

As shown in Table 21 of Appendix D, total recurrent expenditure for technical and vocational education amounted to £1.26 million in 1962, thus showing an annual rate of increase of 30.7 per cent over the period under review.

The different systems of recording government expenditure among the regions and the frequent changes introduced during the period under review make it difficult to analyse the expenditure trend in either time or space or its breakdown by type of institution. However, by comparing the data available through time and between regions, it has been possible to build up Table 28 which, though largely based on reasoned estimates, gives a rough idea of the prevailing trends in the recurrent expenditure of the most important institutions in this type of education—technical institutes, trade centres, and craft schools.

The figures shown in Table 28 do not lend themselves to comments of a general nature, as they include in many cases expenses relating to institutions which had just started their activity and were obviously working below their full capacity, with the result that the cost per student was abnormally high. What can be clearly observed is that technical and vocational education as compared with other types of education at the secondary level involves higher unit costs. There are a number

TABLE 28. Recurrent expenditure in major technical and vocational institutions in Nigeria, 1952-62.

	1952	1955	1957	1959	1962
<i>Recurrent expenditure (£ thousand)¹</i>					
North (technical institutes and trade centres)	51.7	119.5	...	250.5	265.4
North (craft schools)	..	..	17.9	97.2	167.3
East (technical institutes and trade centres)	43.0	46.0	...	70.1	145.8
West (trade centres)	..	27.5	65.7	123.9	225.8
Lagos (technical institutes and trade centres)	82.2	111.9	...	195.0	240.0
<i>Personal emoluments² as percentage of total expenditure</i>					
North (technical institutes and trade centres)	67.1	53.2	...	67.9	69.7
North (craft schools)	..	..	47.9	43.2	38.9
East (technical institutes and trade centres)	70.2	47.8	...	61.3	58.3
West (trade centres)	..	46.5	68.3	58.1	67.6
Lagos (technical institutes and trade centres)	63.1	58.0	...	69.2	69.6
<i>Average cost per student (£)</i>					
North (technical institutes and trade centres)	377	186	...	366	279
North (craft schools)	..	..	180	155	101
East (technical institutes and trade centres)	265	...	...	230	280
West (trade centres)	..	...	300	500	290
Lagos (technical institutes and trade centres)	205	185	...	235	250

1. Excluding expenditure for machinery and equipment even if recorded as recurrent items

2. Including local transport and travelling but excluding labour

of contributing factors to this effect. In the first place, the fact that the schools are government-operated contributes to increasing the cost of the teaching staff which is paid on the higher salary scales of the civil service.¹ Secondly, expatriates represented a strong contingent in the teaching staff. To give an example extracted from the statistics of 1962, technical institutes and trade centres employed sixty-seven expatriates out of a total teaching staff of seventy-eight in the North, twenty-three out of thirty-five in the East, twenty-three out of thirty-four in the West, and twenty-eight out of forty-six in Lagos. A third element is the upkeep and maintenance costs which in these institutions are much higher than for primary or secondary schools. All of these factors, combined in some cases with enrolments at less than full capacity, can drive the average annual cost per pupil to as high as £ 500.

1. The general decline in the percentage of staff costs in 1955 is due to the departure of a number of expatriate teachers engaged under the United Kingdom-supported development programme who had completed their terms and were not replaced immediately with new expatriate recruits. In the following years the percentage increased and exceeded the level of 1952.

6 Higher education

The development of a national university system

The national university system in Nigeria is far too young to be the subject of an historical outline. Out of the five existing universities, two were established only in 1962, one in 1961, and one in 1960. The oldest, the University of Ibadan, was created in 1948 and until 1960 was the only university in the country. Nigeria has always been heavily dependent on overseas training to meet her pressing needs for high-level manpower, and even now almost one-third of the total student population in higher education is studying abroad.

The University of Ibadan, which was one of the two institutions recommended in 1945 by the Elliot Commission on Higher Education in West Africa, did not have independent university status but was, until 1962, in a formal sense a constituent college of the University of London, by which it was sponsored and on whose behalf degrees were granted.

Under the ten-year development plan the Nigerian College of Arts, Science and Technology (NCAST) was established in Nigeria in 1952. This college, however, did not have university status and courses in arts and science were therefore conducted at the intermediate level only. In addition, however, the college carried diploma courses in architecture, surveying, accountancy, and pharmacy on behalf of the corresponding United Kingdom professional institutes. NCAST was established on a regional basis with branches at Zaria (North), Enugu (East) and Ibadan (West).

Moves to establish full national universities began immediately after the 1954 constitution was granted, but the first project materialized only in 1960 with the creation in the East of the University of Nigeria at Nsukka as the first university granting its own degrees.

A plan for the constitution of a national university system, however, matured only in 1960 as a result of the recommendations presented by the Ashby commis-

sion.¹ The commission's report called for the establishment of three more universities, one at Ife (West), another in Zaria (North), and the third in Lagos.

The first to open, in October 1961, was the University of Ife, followed in 1962 by the University of Lagos and by Ahmadu Bello University in the North. As a result of this development, NCAST was dissolved and its premises were transferred to the new regional universities.

All the new universities had autonomous status and were empowered to grant their own degrees which would be recognized throughout the country. In 1963, with a new constitutive Act, the University of Ibadan was given the same status and a system of two federal and three regional universities was thus begun.

In order to ensure, especially at the start, that they would not lack the necessary experience and guidance, each university has established some links with one or more overseas institutions which are providing advisory and teaching staff for their immediate needs. The University of Ibadan, which is already a well-established institution, still maintains links with the University of London; the University of Nigeria has co-operation with Michigan State University and a relationship also with the University of London; the University of Ife is on the way to establishing links with the University of Wisconsin; Ahmadu Bello University has its Institute of Administration in special relationship with the University of Pittsburgh, and also has contacts with the University of Manchester; and finally, the University of Lagos has its faculty of business and social studies sponsored by New York University and the faculty of engineering by Unesco.

A national universities commission proposed by the Ashby report,² having the task of 'securing and distributing funds for the universities, co-ordinating their activities and providing cohesion for the whole system of higher education' was established in 1962.

The system of financing

Nigerian universities are autonomous institutions set up by a parliamentary Act of the federal or regional legislatures. In the constituting Act, provisions are made for the financing of both capital and recurrent costs from government funds. In addition, being autonomous, the universities have the power to raise other funds by way of fees, to invest deposits and endowments, negotiate loans, receive grants, and conduct activities falling within the scope of their institutional objectives.

The main responsibility for financing recurrent and capital costs lies, in any

1. Commission on Post-School Certificate and Higher Education in Nigeria, 1960, of which Sir Eric Ashby was the chairman.

2. *Investment in Education*, op. cit.

case, with the governments. Normally they provide the capital outlay from the development funds in the form of subventions and contribute to the recurrent costs with annual grants covering that part of expenditure which is not offset by the universities' ordinary internal revenue or by other sources. Because at the start it is not possible to estimate within a convenient range the universities' expenditure, subventions and grants are paid in advance in the form of account payments. For the University of Ibadan, the federal government undertook also the constitution of an endowment fund, part of which was expendable.

In addition to government recurrent grants, the main items in the universities' ordinary revenues are represented by students' fees, income from investments, and staff quarters' rents. These items, however, added together hardly cover between one-fourth and one-third of total recurrent expenditure.

Other revenue, both of a recurrent and capital nature, may result from arrangements which the universities directly or the governments on their behalf enter into with internal or external agencies. By far the most important internal sources of extraordinary revenue so far have been the Marketing Boards, and in particular the Eastern Nigeria Marketing Board, which set aside the sum of £3.5 million for the University of Nigeria, and the Nigerian Cocoa Marketing Board which contributed considerably to the creation of the faculty of agriculture of the University of Ibadan.

External sources are also contributing to the universities' finance, and the United Kingdom contributed substantially to the capital costs of the University of Ibadan and NCAST through the Colonial Development and Welfare Schemes. The new universities are still in the negotiating phase and though many projects have already been defined and contracted, at the end of the academic year 1963/64 only a small part of the commitments had been actually met. The nature of the external aid is both capital and recurrent, but the recurrent part is given in the form of services—teaching and advisory staff—and of supplies. Capital contribution assumes the form of grants for building and for furnishing specialized equipment.

The University of Ibadan

By the end of the academic session 1963/64, the University of Ibadan had completed fifteen years of operation, reaching a student population of over 2,000 with an academic staff of forty professors and 200 lecturers. During the period under review, the university expanded gradually under two five-year development programmes and entered into its third quinquennium of development with the academic session 1962/63.

Between 1952/53 and 1963/64, student enrolment rose at an annual rate of 40.7 per cent and at the end of the period there were ten students to each lecturer,

including assistant lecturers, and fifty students to each professor, excluding associate and visiting professors.

Since its foundation, the University of Ibadan enjoyed a regular income flow in respect of all sections of its budget: recurrent, capital, and research. The recurrent budget was financed from internal sources, the capital budget partly from internal and partly from external sources, and the research budget mainly from external sources.

Recurrent expenditure, which rose from £388,000 in 1952/53 to over £2 million in 1963/64, at an annual rate of 39.9 per cent, was well matched by the inflow of current revenue. This was provided mainly by the federal government ordinary and special annual subventions, and by the expendable endowment fund of £1.5 million which was paid in ten annual instalments between 1952 and 1961. Other recurrent revenue consisted mainly of fees, interest on endowment and investment, and rents. The federal government participation increased from 54.2 per cent in 1952/53 to 76.1 per cent in 1963/64, with a peak of 78.2 per cent in the previous year. Students' fees also rose, from 10.2 per cent to 16.8 per cent in the same period, while interest and rent decreased.

Since its foundation, the university received capital grants totalling £8.33 million, of which £1.17 million was spent before the 1952/53 financial year and £2.0 million was still available at the end of 1963/64. Internal sources provided 64.7 per cent of total grants, while the remaining part came from the Colonial Development and Welfare Scheme funds—£2.20 million, or 26.7 per cent—and other external sources (8.6 per cent). Colonial funds virtually ceased with Independence (although some payments were still being made after 1960) and were replaced by external aid.

For research projects, the university received from the time of its inception grants totalling £1.24 million, of which £198,700 was still unspent at the end of the academic session 1963/64. Grants from external sources covered 84.4 per cent of the total, while the remainder came from the federal government.

Table 29 shows the distribution of expenditure by sources of financing in the biennium July 1962 to June 1964.

The federal government carried the major burden of recurrent and capital expenditure with 76.9 per cent and 71.4 per cent of the respective totals. In actual fact, the governments' share of recurrent expenditure was slightly higher, as some students were on government scholarships.

External sources financed 27.5 per cent of capital and 84.1 per cent of research costs. The figures exclude the external aid contributions in the form of salary to some expatriate professors, which, however, was not a significant part of total recurrent costs.

Table 30 gives the breakdown of recurrent costs among the various items of expenditure at the beginning and at the end of the period under review.

TABLE 29. University of Ibadan: sources of financing of expenditure incurred in the biennium July 1962 to June 1964

	Recurrent expenditure	Capital expenditure	Research schemes	Total
Expenditure (£ thousand)	3 892.2	1 394.2	407.6	5 894.6
Sources of financing (percentage)				
Internal	100.0	72.5	15.9	85.0
Federal government	76.9	71.4	15.9	69.5
Other	23.1	1.1		15.5
External		27.5	84.1	15.0
Colonial grants ¹		2.2	0.5	0.6
Foreign aid		25.3	83.6	14.4
Total sources	100.0	100.0	100.0	100.0

1. From the Colonial Development and Welfare Scheme

TABLE 30. University of Ibadan: recurrent expenditure in the financial years 1952/53 and 1963/64

Item of expenditure	In £ thousand		Percentage	
	1952/53	1963/64	1952/53	1963/64
Administration	35.1	139.0	9.0	6.7
General maintenance	56.2	310.0	14.5	14.8
Departments	173.2	862.0	44.6	41.2
Library	12.5	69.0	3.2	3.3
Other educational expenditure	4.9	94.4	1.3	4.5
Passages and other personal allowances	47.6	261.3	12.3	12.5
Student maintenance	29.7	212.8	7.7	10.2
Other expenses ¹	28.8	141.3	7.4	6.8
Total	388.0	2 089.0	100.0	100.0

1. Including capital equipment and special expenditure

As Table 30 shows, there was a decrease in the proportion of expenditure incurred for administration (from 9.0 per cent to 6.7 per cent), for the various departments (from 44.6 per cent to 41.2 per cent), and for other expenses (from 7.4 per cent to 6.8 per cent). All other items of expenditure increased in percentage, but the only significant increases were for maintenance of students (from 7.7 per cent to 10.2 per cent) and other educational expenditure (from 1.3 per cent to 4.5 per cent).

The increase in the number of students did not bring, as expected, a monetary decrease in recurrent unit costs as this was offset by the increase in prices which certainly occurred during the period under review. The cost per student was £1,054 in 1952/53 when enrolments numbered 368, £1,072 in 1959/60 when the one thousand enrolment target was reached, and £1,037 in 1963/64 when the number

of students rose to 2,016. If we suppose, as done on other occasions in the course of the present study, that over-all prices were affected at the rate of 2 per cent a year during the whole period, it would appear that at 1952/53 constant prices the cost per student was of the order of £922 in 1959/60 and of £809 in 1963/64, a level still much higher than the £500 unit cost mentioned as a possible target in the Ashby report.¹

In Table 31, the unit costs in the three financial years mentioned above are analysed by item of expenditure.

TABLE 31. University of Ibadan: recurrent unit costs in the financial years 1952/53, 1959/60 and 1963/64 (£ per student)

Item of expenditure	1952/53	1959/60	1963/64
Administration	95	75	69
General maintenance	153	187	154
Departments	471	425	428
Library	34	38	34
Other educational expenditure	13	20	46
Passages and other personal allowances	129	160	130
Students maintenance	81	112	106
Other expenses ¹	78	55	70
Total	1 054	1 072	1 037

1. Including capital equipment and special expenditure

As can be seen, only administrative expenses seem to show a definite downward trend with the increase of the number of students, but generally it appears that the expected economies of scale have been offset by increasing costs in all other items of expenditure.

Total capital expenditure incurred by the University of Ibadan up to June 1964 was £5.34 million, of which £5.7 million was spent for buildings strictly pertaining to the university, excluding such additions as the rest-house and its annexes, the primary school, the international secondary school, etc., which, however, were sited in the university campus and were financed from the university's capital budget. Table 32 illustrates the distribution of the £5.7 million among the various items.

As shown in Table 32, auxiliary buildings, which include students' residence halls, staff housing, kitchens, dining halls, sports facilities, cafeterias, etc., took 59.2 per cent of total capital costs. In the academic session 1963/64, the university offered accommodation to about 2,000 residential students, and probably as many staff members if intermediate and junior administrative staff members are included.

1. *Investment in Education*, op. cit.

TABLE 32. University of Ibadan: capital expenditure incurred to June 1964

Item of expenditure	In £ thousand	percentage	Item of expenditure	In £ thousand	percentage
Professional fees	138.3	2.4	Equipment and furniture:		
General works ¹	807.0	14.2	educational	206.1	3.6
Buildings:			auxiliary	53.1	0.9
educational	1 072.6	18.8	Unallocated expenditure	52.6	0.9
auxiliary	3 374.3	59.2			
			Total	5 704.0	100.0

1. Including £150 000 of working capital (repaid).

The University of Nigeria, Nsukka

The University of Nigeria, Nsukka, began its first regular academic session in provisional headquarters on 12 October 1960, with 259 students. In 1963/64, their number had increased to 1,828, of which 334 were resident in the Enugu campus of the university.

The university had a total staff of 1,600, of which 195 formed the academic body and thirty-nine the senior administrative staff. Included in this figure but not on the university's pay-roll were thirty academic and administrative advisers from Michigan State University, nine from other countries, and twenty-two Peace Corps volunteers.

The university began with £2.5 million accumulated funds set aside from annual subventions of the Eastern Nigeria Marketing Board (ENMB) and in the four years following received another £3 million from public sources—£1 million additional from the ENMB, £1.8 million from the Eastern Nigerian government, and £200,000 from the federal government. Other grants and gifts were provided from both internal and external sources to a total of £190,000 and, in addition, the university took over the fixed assets of the Enugu branch of the former Nigerian College of Arts, Science and Technology, which were entered in the balance sheet at a value of over £1 million.

Recurrent revenue, which included the evaluation at internal costs of services rendered by unpaid expatriate staff, rose from £52,100 in 1960/61 to £603,500 in 1963/64. Students' fees represented the highest item of recurrent revenue and increased from £32,000 in 1960/61 to £300,200 in 1963/64.

The distribution of recurrent and other revenue in the biennium July 1962 to June 1964 is given in Table 33.

Current revenue represented 36.7 per cent of total revenue, while the remaining part consisted of grants and donations. Government sources supplied 57.1 per cent of total income, while 12.3 per cent came from external sources, 22.1 per cent from fees, 3.2 per cent from sundry income and other unspecified sources.

TABLE 33. University of Nigeria, Nsukka: revenue during the period July 1962 to June 1964

	In £ thousand		Percentage	
Grants and donations ¹		1 451.5		63.3
Eastern Nigerian government	1 110.0		48.4	
Federal government	200.0		8.7	
External sources	60.8		2.7	
Other, not specified	80.7		3.5	
Current revenue ²		841.9		36.7
Fees	506.8		22.1	
Nominal salaries (unpaid staff)	220.7		9.6	
Rents and interests	72.9		3.2	
Sundry income	41.5		1.8	
Total revenue		2 293.4		100.0

1. Excluding the value of the NCAST assets but including the value of other gifts in kind

2. Excluding reimbursements

TABLE 34. University of Nigeria, Nsukka: recurrent expenditure in the financial years 1962/63 and 1963/64

Item of expenditure	In £ thousand		Percentage	
	1962/63	1963/64	1962/63	1963/64
Personal emoluments and allowances ¹	569.5	732.9	58.0	63.9
Administrative expenses	183.0	181.0	18.7	15.8
Maintenance	106.5	101.0	10.9	8.8
Students' section and hostel	120.8	130.6	12.3	11.4
Other expenses	1.1	1.2	0.1	0.1
Total recurrent expenditure ²	980.9	1 146.7	100.0	100.0

1. Including nominal salaries of unpaid staff

2. Excluding depreciation and insurance sinking fund

Recurrent expenditure obviously exceeded by far the income provided by current revenue and the difference was met from the government grants fund. Table 34 gives the distribution of recurrent expenditure in the financial years 1962/63 and 1963/64.

Personal emoluments and allowances absorbed 58.0 per cent of total expenditure in 1962/63 and 63.9 per cent in the following year. This figure, however, does not include staff passages and travelling and the maintenance costs of the Michigan State University and Peace Corps groups serving at the university. These are considered in the university's accounts as administrative charges, but if included in personal emoluments would raise the percentage to 69.9 per cent and 73.1 per cent respectively.

Total capital investment since the university's foundation amounted, at the end

TABLE 35. University of Nigeria, Nsukka: capital expenditure incurred to 30 June 1964

Item of expenditure	In £ thousand	Percentage
Compensation and leasehold	31.6	0.6
Roads, foot paths and landscaping	109.3	2.1
Buildings: residential	2 787.9	53.3
non-residential	1 320.4	25.2
Playings fields	108.9	2.1
Plants and machinery	97.5	1.9
Furniture and equipment	670.6	12.8
Books	70.9	1.3
Motor vehicles	37.5	0.7
Total	5 236.6	100.0

of the financial year 1963/64, to £5.24 million. This figure represents the value of fixed assets as shown in the audited accounts excluding depreciation, but including the assessed value of gifts and donations and of the incorporated Enugu branch of NCAST. Table 35 gives the distribution by items of expenditure.

As observed for the University of Ibadan, residential buildings absorbed the greatest part of capital investment and though the university had not yet started its first six-year development programme, it is believed that these will have to be expanded considerably.

The recurrent cost per student was in 1962/63 £854 and in 1963/64 £627, far less than for the University of Ibadan. There are a number of reasons for the lower figure, such as the more favourable student/teacher ratio—twelve students to every lecturer as compared with ten in the University of Ibadan, the low incidence of maintenance costs—8.8 per cent as compared with 14.8 per cent in the University of Ibadan, and of the additional expenses in respect of expatriate staff, especially passages and travel—9.2 per cent as compared with 12.5 per cent in the University of Ibadan.

The University of Lagos

The University of Lagos accepted its first students in October 1962. It began with the faculty of business and social studies, the faculty of law, and the medical school, the last being established as a completely autonomous unit within the university.

The institution was almost totally financed by the federal government for both capital and recurrent expenditure. While the university was on the ministry of education's budget, the medical school was financed through the ministry of health.

Table 36 gives the university's revenue (excluding the medical school) in the first two years of operation, 1962/63 and 1963/64.

As Table 36 shows, the federal government was supporting the university at a

TABLE 36. University of Lagos: sources of financing in the years 1962/63 and 1963/64

Sources of financing	In £ thousand		Percentage	
	1962/63	1963/64	1962/63	1963/64
Federal government	650.0	930.0	92.3	95.2
Capital	250.0	500.0	35.5	51.2
Recurrent	400.0	430.0	56.8	44.0
Students' fees	8.9	19.8	1.3	2.0
Interests	3.9	9.4	0.5	1.0
Donations	22.6	2.2	3.2	0.2
Special funds	17.1	9.8	2.4	1.0
Other income	1.9	5.7	0.3	0.6
Total	704.4	976.9	100.0	100.0

rate of well over 90 per cent. The table, however, does not show the amount of external aid represented by salaries paid to the New York University personnel staffing the faculty of business and social studies, which amounted to £81,400.

The university started its first academic year with an enrolment of seventy-two students, which grew to 219 in 1963/64. The academic staff/student ratio in 1963/64 was fifteen students to each professor and 8.5 to each lecturer; about half of the academic staff was non-Nigerian. Recurrent expenditure amounted to £128,000 in 1962/63, and £218,400 in 1963/64, of which 47.9 per cent and 58.2 per cent represented respectively salaries and wages including superannuation and provident funds. Academic staff salaries paid directly by the university represented 11.8 per cent in 1962/63 and 14.6 per cent in 1963/64 of total expenditure.

Table 37 gives the cost of the various services in the two academic years under consideration.

The high cost of the administration department—59.8 per cent in 1962/63 and 60.8 per cent in 1963/64—is mostly charged to the registrar's office, but the bulk of these costs is shown in the budget as sundry expenses which are not given in detail.

The recurrent cost per student in the first year of operation amounted to £1,780, but in 1963/64, with the increase in the number of enrolments, it decreased to £1,000. This is still high, however, if we consider that the cost attributed to unpaid expatriate staff is not added.

In the first two years the University of Lagos functioned in temporary premises, but work was in progress on the permanent site which the federal government had acquired near Lagos for this purpose. At the end of the financial year 1963/64 a total of £1,157,000 had already been spent on buildings and equipment, distributed as shown in Table 38.

As building continues with a certain order of priority, the table's percentages have no great significance in showing the relative importance of the various items of capital investment.

TABLE 37. University of Lagos: recurrent expenditure in the years 1962/63 and 1963/64

Item of expenditure	In £ thousand		Percentage	
	1962/63	1963/64	1962/63	1963/64
Provisional council	6.0	4.6	4.7	2.1
Administration	76.5	132.7	59.8	60.8
Faculties and departments	15.5	32.3	12.1	14.8
Library	6.4	14.8	5.0	6.8
Catering and hostels	18.0	22.8	14.1	10.4
Maintenance	3.1	6.8	2.4	3.1
Other expenses	2.5	4.4	1.9	2.0
Total	128.0	218.4	100.0	100.0

TABLE 38. University of Lagos: capital expenditure to 30 June 1964

Item of expenditure	In £ thousand	Percentage
Land acquisition compensation	385.1	33.3
Buildings: residential	330.0	28.5
non-residential	280.0	24.2
Furniture and equipment: residential	43.6	3.8
non-residential	29.3	2.5
Library books ¹	72.9	6.3
Motor vehicles	16.1	1.4
Total	1 157.0	100.0
1. Capitalized		

The University of Ife

The university officially opened in 1961 with an initial grant of £250,000 from the government of Western Nigeria. In the year 1962/63, the regional government grant amounted to £621,000, and in 1963/64 this and other grants amounted to £354,800. Most of the revenue came from public sources, while fees and interests yielded £84,300 in 1962/63, or 16.9 per cent of the total.

The University of Ife at the end of the academic year 1963/64 was still in the premises of the Ibadan branch of the Nigerian College of Arts, Science and Technology which were donated by the federal government and valued at about £1.5 million. The site of the University at Ife had been chosen but work was still to begin because of lack of financial resources.

In 1962/63, the university had an enrolment of 244 students, which rose to 475 in 1963/64. In that year, the academic staff consisted of five professors and fifty-three lecturers, giving a ratio of ninety-five students to each professor and nine

TABLE 39. University of Ife: recurrent expenditure for nine months ended 30 June 1964

Item of expenditure	In £ thousand	Percentage	Item of expenditure	In £ thousand	Percentage
Personal emoluments and allowances	200.1	59.6	Establishments and general services	51.2	15.3
Travelling and passages	24.6	7.3	Students' maintenance	17.5	5.2
Administration	27.9	8.3	Miscellaneous	14.3	4.3
			Total	335.6	100.0

students to each lecturer. Four professors and twenty-seven lecturers were non-Nigerian.

The breakdown of recurrent expenditure is available for only nine months of the academic session 1963/64, and is shown in Table 39.

The recurrent costs per student were slightly higher than £700 which, extended to a full year, would probably be in the region of £900.

Ahmadu Bello University

This university began in October 1962 on the main campus of the former Nigerian College of Arts, Science and Technology at Zaria with building and equipment valued at over £2.6 million. In addition, the university took over as special institutes the Abdullahi Bayero College of Arabic Studies, valued at £250,000, the Institute of Administration, valued at £390,000 and the Institute of Agricultural Research, valued at £315,000, making a total asset of over £3.5 million.

The Northern Region government made a grant of £25,000 at the start and financed the university's recurrent expenditure at the rate of £40,000 a month. The special institutes, however, continued to be financed from the budgets of the ministries which had been charged with them before the establishment of the university.

The construction of new buildings had not yet commenced at the end of the financial year 1963/64, although £2.1 million had already been earmarked for this purpose from external assistance.

Enrolments numbered 426 in 1962/63 and 558 in 1963/64, with a total academic staff of sixteen professors and eighty-six lecturers, giving a ratio of thirty-five students to each professor and 6.5 students to each lecturer. We were unable to obtain the statements of accounts of the university, but estimates of the over-all recurrent expenditure run to £680,000 in 1962/63 and £840,000 in 1963/64, showing a cost per student of over £1,500.

Students abroad

As stated at the beginning of this chapter, Nigeria is still heavily dependent on the training of students abroad in many specialized fields of education and in some fields for which the facilities offered in the country are scarce or inadequate. Unfortunately, reliable statistics on the number of Nigerian students abroad, the level of their studies, and the sources of financial support are not available.

Attempts have been made to determine approximately the number of these students, and probably the most recent and complete of such attempts is that made by Ladislav Cerych in one of his contributions to the present series of studies.¹ For the number of students overseas, the broad estimate is given as between 14,200 and 17,200 in 1963/64. Taking as a basis the more conservative of the two figures, and using the fragmentary information available, we may venture a guess about the distribution of these students by place of studies. It appears that about 62 per cent were in the United Kingdom, 10 per cent in the United States of America, and the remaining 28 per cent in other countries.

The total number of Nigerian students abroad in 1952 is estimated at 1,500 and the increase along the eleven-year period would appear to be tenfold.

As for the level of studies followed by Nigerian students abroad, Mr. Cerych calculates that not more than 20 per cent of the total in 1963/64 were attending courses at the university level, while the remaining 80 per cent were either in technical or teacher-training institutions, or in practical training and private colleges and institutions below university level. It is difficult from the statistics available to give more detailed global information about the level and nature of the studies pursued abroad.

We can distinguish the sources of financial support between internal (public and private) and external sources. Public internal sources are represented by government scholarships and scholarships awarded by public corporations and institutions. Internal private sources are represented by self-supporting students or students whose schooling is financed by their parents, other private persons, or ethnic unions. External sources are represented by all schemes financed by international organizations, foreign governments, and foreign public and private institutions.

At the university level the two dominant sources of financial support were the federal and regional governments and the governments of the receiving countries. Both sources act through scholarship schemes of differing natures and importance. It is believed that private financing at the university level is very limited, as with today's multiplicity of scholarship schemes, both internal and external, almost

1. L. Cerych, *The Integration of External Assistance with Educational Planning in Nigeria*, chapter 3, p. 265 of this volume.

every Nigerian who has reached the necessary qualifications for proceeding to the higher level of studies can reasonably expect to find a source of financing.

If we put the total figure of university students abroad in 1963/64 at 3,000, it can be estimated that 65 per cent were sponsored by the federal and regional governments or other public agencies in Nigeria, 30 per cent by governments or institutions of the receiving countries, and only 5 per cent were privately supported.

Government expenditure on scholarships abroad began in 1938/39 when the first government scholarship was awarded. Ten years later the number had reached the figure of forty-one. Greatly increased provisions were made following the report of the Commission on Nigerianisation of the Civil Service in 1948, and by 1952 a total of over 250 scholarship recipients were studying overseas. During the period under review, federal and regional government allocations for scholarships abroad increased constantly from £235,800 in 1952/53 to £963,100 in 1960/61. In this year provisions were further increased as the scholarship policy was integrated into the educational development plan. In 1961/62, the total amount spent for scholarships abroad was £1.35 million, reaching £1.5 million in 1962/63 and is estimated to be £1.6 million in the following year.

Table 40 shows the relevant characteristics of government expenditure on scholarships abroad during the period under review as compared with other related expenditure aggregates.

TABLE 40. Government expenditure on scholarships abroad in selected years during the period 1952/53 to 1962/63

	1952/53	1955/56	1959/60	1962/63
Total government expenditure on scholarships abroad (£thousand)	235.8	526.1	820.9	1 496.0
As percentage of total government expenditure on scholarships	86.7	81.2	74.3	72.3
As percentage of total government recurrent expenditure on education	4.8	5.5	4.4	5.7
As percentage of total government recurrent expenditure on higher education	34.6	34.3	39.1	31.8

7 External aid

The external aid agencies

In the years before Independence, the United Kingdom government was by far the main source of financial assistance to Nigeria's development projects. We have already mentioned the Colonial Development and Welfare Scheme and the part which it played in the development of secondary and higher education. Other forms of technical assistance given to the country by the United Kingdom government included the supply of teachers and senior administrative staff and the training of Nigerians in the United Kingdom. In those years, the activities of agencies other than the United Kingdom government were confined to the International Co-operation Administration (ICA), the United Nations, and some voluntary organizations. The amount of aid coming from these sources was very limited, at least as compared with the levels it reached after Independence.

Prior to 1960, the Colonial Development and Welfare Scheme and the ICA grants were appropriated into the Nigerian budget and, therefore, have already been shown as part of public expenditure. After Independence, external agencies acted autonomously on the basis of agreements which they entered into with the Nigerian government and the sums allocated or expanded by these agencies were not shown in the government accounts.

In the present study we consider Nigeria as a recipient of external aid from the date of Independence and under the external aid aggregate we include only expenditure financed through officially established external aid agencies. In this group we include those agencies which were operating in the country as extensions of the activities of the accredited diplomatic representations, or as separate institutions which had established similar formal relationships with the Nigerian government to this purpose.

This is obviously a definition of convenience suggested by the necessity to avoid duplication in the expenditure account and it is not intended as a concept of external aid to be used for general purposes.

The tables included in this chapter refer only to the major external aid agencies operating in Nigeria for which it has been possible to gather sufficient information, and to some others only for the part which they played in specific and important projects in the field of education.

The agencies whose complete activity is reviewed are the United Nations, the United States Agency for International Development (US-AID), the United Kingdom government, and the Ford Foundation (USA). The agencies participating in important projects are the Rockefeller Foundation (USA), Carnegie Corporation (USA), International Business Machines, Inc. (USA), Nuffield Foundation (UK), and the governments of the Federal Republic of Germany and the Netherlands.

Major forms of external aid

External aid usually takes two main forms: the extension of loans or grants for specific purposes, and 'technical assistance' which includes the supply of personnel and equipment and the training of Nigerians abroad, mainly in the donor countries. During the period under review, Nigeria did not receive loans for specific educational projects, as the first International Development Association (IDA) credit of this kind was still under negotiation with the International Bank for Reconstruction and Development (IBRD) at the end of 1964.¹

The external aid received by Nigeria can be classified as follows: (a) capital grants for building and equipment of educational establishments; (b) supply of school equipment; (c) supply of teaching and administrative staff; (d) services rendered under general technical assistance programmes, such as (i) administration and educational planning, (ii) educational research, (iii) organization of training courses for teachers, school administrators and supervisors, and (iv) organization of conferences and seminars; (e) award of scholarships, fellowships, bursaries and visitorships tenable abroad.

Most agencies sponsored specific educational projects through agreements with the Nigerian government in which the contribution of both sides was fixed in advance in accordance with a plan of operation. In some cases, more than one agency participated in a single project.

Scholarships were awarded under a single national scheme or under separate schemes sponsored by different national organizations and the number available for each scheme was set year by year.

1. A credit from IDA worth U.S. \$20 million was approved for secondary education and signed on 1 March 1965.

A certain co-ordination of the aid given by the most important agencies operating in Nigeria was undertaken by the Bureau for External Aid for Education, a unit sponsored by the Carnegie Corporation and attached to the federal ministry of education.

Major external aid projects for the operation of educational institutions

From Independence, the sum of over £20 million was committed by external agencies for the establishment, expansion and operation of educational institutions in Nigeria and, at the end of 1964, £7.7 million, or 38.2 per cent of commitments had already been expended or disbursed. Most of the projects were begun at the end of 1962 as part of the six-year development programme which began in 1962, and this explains the great difference between commitments and disbursements.

Table 41 gives the breakdown by region and type of institution.

TABLE 41. Major external aid projects related to educational institutions in the period 1960-64

	Aid committed (£ thousand)	Aid disbursed		Distribution of total aid (%)	
		Of total (£ thousand)	committed (%)	Committed	Disbursed
<i>By region</i>					
Northern	5 116.0	1 017.7	19.9	25.4	13.2
Eastern	5 470.9	2 351.7	43.0	27.2	30.6
Western	6 779.8	3 227.1	47.6	33.6	41.9
Lagos	2 228.8	815.2	36.6	11.1	10.6
Country-wide	552.1	284.7	51.6	2.7	3.7
All of Nigeria	20 147.6	7 696.4	38.2	100.0	100.0
<i>By type of education</i>					
Primary					
Secondary	1 558.1	718.6	46.1	7.7	9.4
Teacher training	5 998.8	2 149.0	35.8	29.8	27.9
Technical and vocational	2 716.3	564.2	20.8	13.5	7.3
Higher	9 874.4	4 264.6	43.2	49.0	55.4
Total	20 147.6	7 696.4	38.2	100.0	100.0

As Table 41 shows, the allocation by region of commitments gives to the Northern Region 25.4 per cent of the total and slightly more to the East (27.2 per cent) and West (33.6 per cent), while the Federal Territory was allotted 11.1 per cent. Disbursements show that the Eastern and Western Regions—where projects,

especially those concerning the Universities of Ibadan and Nsukka, were started earlier—had received 30.6 per cent and 41.9 per cent respectively of the total amount, while the Northern Region had received only 13.2 per cent. This is reflected in the percentages of disbursements over commitments.

The distribution by type of education shows that there were no projects involving primary schools, while higher education and teacher training absorbed most of the funds—49.0 per cent and 29.8 per cent respectively. Of the remaining part, 13.5 per cent went to technical and vocational education and 7.7 per cent to secondary education. Technical and vocational education has the lowest percentage of disbursements (20.8 per cent).

The differences noted are mainly attributable to changes in the policies of the donors and recipient governments as to the priorities to be assigned to the various fields of education. In the first instance higher education attracted most of the aid available. Then teacher training at the secondary level was considered as a priority area of investment, and more recently particular consideration has been given to the development of technical and vocational education.

Major external aid projects related to general educational matters

The improvement of the educational machinery and its efficiency has received particular attention from the major donors since the beginning. A total of almost £2 million was committed during the period under consideration for this purpose, of which 60.5 per cent had been disbursed by the end of 1964. Table 42 shows the analysis of these figures.

Most of the amount committed was allocated to the federal government (38.1 per cent) or devoted to country-wide projects (55.5 per cent), while only very little (6.4 per cent) was assigned to regional projects.

Educational planning and modern teaching aids (including broadcasting) absorbed respectively 34.5 per cent and 34.2 per cent of commitments and 52.7 per cent and 31.2 per cent respectively of disbursements. Examinations and testing accounted for 14.2 per cent, subject teaching 14.4 per cent, while small amounts went to school health and nutrition and sundry research.

The figures show that the introduction of modern techniques in the administration and operation of the school system were the main concern of the external aid agencies, though the amounts committed and expended seem to be inadequate for a country such as Nigeria with a school population of over 3 million and with 17,000 educational institutions spread over a large area.

TABLE 42. Major external aid projects related to general educational matters in the period 1960-64

	Aid committed (£ thousand)	Aid disbursed		Distribution of total aid (%)	
		(£ thousand)	of total committed (%)	Committed	Disbursed
<i>By region</i>					
Northern	8.7	8.7	100.0	0.5	0.8
Eastern	62.2	59.9	96.3	3.4	5.3
Western	47.3	47.3	100.0	2.5	4.2
Federal	708.3	370.2	52.3	38.1	32.9
Unspecified	1 031.3	637.8	61.8	55.5	56.8
All of Nigeria	1 857.3	1 123.9	60.5	100.0	100.0
<i>By subject</i>					
Educational planning and administration	641.1	392.4	92.4	34.5	52.7
Examinations and testing	263.4	69.4	26.3	14.2	6.2
Modern aids and broadcasting	635.3	351.2	55.3	34.2	31.2
Subject teaching	267.6	90.1	33.7	14.4	8.0
School health and nutrition	29.6		0.0	1.6	
Sundry research	20.8	20.8	100.0	1.1	1.9
Total	1 857.3	1 123.9	60.5	100.0	100.0

Voluntary teachers' schemes

Some foreign governments established as part of their aid programmes to developing countries a form of voluntary service in these countries which was mainly directed to the field of education. The most important of such schemes operating in Nigeria were the Voluntary Service Overseas (VSO) and the Graduate Voluntary Service Overseas (GVSO) sponsored by the United Kingdom government and organized through the British Council, the Peace Corps Volunteers (PCV) sponsored by the United States government, and the Canadian University Service Overseas (CUSO) sponsored by the Canadian government in co-operation with Canadian universities. The VSO and GVSO services started in 1961 and 1963 respectively. The first group of PCVs arrived in Nigeria in 1961 and the CUSO group in 1963.

The sponsoring governments' costs for the volunteers covered mainly preliminary training, maintenance and supply during the recruitment and discharge periods, and transport to and from Nigeria. Living costs in the form of salary for the PCVs were paid by the United States government, while United Kingdom and Canadian volunteers were paid by the Nigerian government according to pre-established salary scales. In addition, the Nigerian government provided free housing and transportation within Nigeria.

TABLE 43. Cost to donor of Peace Corps volunteer teachers during the period 1961 to 1964 (in £ thousand)

Year	Northern Region	Eastern Region	Western Region	Midwestern Region	Federal government	All of Nigeria
1961	42.4	122.6	73.1	.	18.9	257.0
1962	58.9	223.9	150.9	.	21.2	454.9
1963	235.7	306.4	259.3	.	23.6	825.0
1964	310.7	310.7	207.1	207.1	39.4	1 075.0
Total	647.7	963.6	690.4	207.1	103.1	2 661.9

There are no published accounts of the costs sustained by the external agencies for such schemes; therefore, only estimates are possible on the basis of the average unit cost per volunteer and the cumulative number of years of service rendered.

Graduate and non-graduate United Kingdom volunteers at the end of 1964 had rendered approximately 109 years of service at the average cost to the donor country of £350 each for a total of £38,000.

CUSO had rendered approximately twenty-one years of service at the average cost of £620 per volunteer, for a total of £13,000.

Only for the PCVs is it possible to give the breakdown by year and region of their cost, which is calculated at the average rate of £2,360 from 1961 through 1963 and £2,070 in 1964, as indicated in the third annual Peace Corps report and shown in Table 43.

External aid scholarship schemes

Almost all countries included in the list of external aid donors and enjoying diplomatic relations with Nigeria had their own schemes for scholarships and training, but unfortunately no reports are available on the number of scholarships awarded and their cost to the donor country.

The schemes for which it has been possible to collect some reliable estimates are the United Nations fellowship scheme, the United Kingdom Special Commonwealth African Assistance Plan (SCAAP), the US-AID Participant Training Program, and the Afro-American Institute's African Scholarship Program of American Universities (ASPAU). Although these schemes are the most important as far as the number of awards granted yearly is concerned, they may represent less than 50 per cent of the total aid received by Nigeria in this form.

During the period under consideration, the cost of the schemes mentioned above to the donors amounted to £2,716,800, distributed as indicated in Table 44.

The average cost per student for one year's training varied from country to country according to the cost of travel, the cost of living in the receiving country, and the financial treatment accorded to the students by the donor. In addition, a great number of awards did not specify the cost of educational services provided

TABLE 44. Cost to donors of scholarship schemes during the period 1960-64 (estimated)

Programme	Number of students	Total cost (£ thousand)	Average cost per student (£)
United Nations Expanded Programme of Technical Assistance (UN-EPTA)	96	154.6	1 610
United Nations regular programme	132	208.9	1 580
United States Agency for International Development (US-AID)-participants	682	1 252.7	1 840
African Scholarship Program of American Universities (ASPAU)	376	873.2	2 320
Special Commonwealth African Assistance Plan (SCAAP)	233	227.4	975
Total	1 519	2 716.8	1 790

free of charge in government-owned universities, stating only that the scholarship holder would enjoy a fee-free education.

Table 44 does not reflect this cost because the number of students is not calculated in student-years but in number of awards, while the total cost refers to the sum actually disbursed at the end of 1964.

8 Conclusions

Rapid educational expansion and rising financial commitments

This study presents a statistical and historical interpretation of the financing of Nigeria's system of formal education during the most crucial period of its expansion. The broad lines of more than a decade of educational development are thus considered from the viewpoint of their financial implications. Elucidation of such past experience, and the analytical observation of it, is the study's sole purpose and justification. As such, it is a first, but essential, step in providing the detailed knowledge—and the perspective—needed by educational policy-makers who must fit future educational requirements more firmly within a framework of national economic resource use.

Throughout the eleven-year period covered, governments placed major emphasis on expanding formal education at all levels. They achieved outstanding results in creating educational facilities and in boosting enrolments. School buildings rose in rural areas where before there had been no formal education. University campuses were built. Enrolments trebled: that is, the total numbers attending all institutions of formal education rose from somewhat over one million in 1952 to nearly three million in 1962.

Enrolments in primary schools, which already in 1952 had reached one million, rose over the period at an annual rate of 17 per cent. This was made possible by the construction of 6,000 more schools and about 50,000 new class-rooms. By 1962, over 2.8 million pupils were being taught by almost 100,000 teachers in the 15,500 primary schools of the Federation. The distribution of these facilities and enrolments among the regions, however, showed wide differences in relation to their total areas and populations. Enrolments in secondary schools, combined with those of teacher training and of technical and vocational education, increased at an annual rate of 25 per cent. The number of students in the nation's universities

increased tenfold, from the 1952/53 total of less than 400 attending one university to the 1962/63 total of nearly 4,000 students in five universities. (Because of insufficiently detailed, and comparable, census data, no realistic assessments can be made of the changing proportions of school-age populations reflected by these enrolments.)¹

In financial terms, these enrolments were matched by continuously rising total expenditures on formal education, from all internal sources, which grew from £9.7 million in 1952 to £41.7 million in 1962. Expressed as a proportion of national resources in use during the period, the share of gross national product devoted to education was enlarged from 1.58 per cent to 3.54 per cent—a substantial increase especially when account is taken of the fact that the activities of part of the population (possibly around 30 per cent) were still very little touched by the money economy.

At the same time as total expenditures were increasing, governments—central and regional—were making a rising proportionate contribution to the financing of education. This trend had become evident immediately after World War II, but it was only in 1949 with the adoption of the Phillipson system of grants-in-aid that the central government took a significant financial responsibility for education. During the mid-1950s, regional governments further increased their financial participation when facilities for primary education were considerably extended and made free of direct fees to about 50 per cent of the parents of primary-school pupils in the Federation. During the period reviewed, the contribution from public funds to the over-all educational effort rose from 55 per cent of total educational expenditure to above 80 per cent.

Variations among regions

Regional governments, which were making the chief decisions on the directions and pace of the expansion of Nigeria's education during this period, did not co-ordinate their programmes as part of a design for national educational investment. Rather, indeed, the reverse: each region pressed ahead independently.

In large measure, this can be explained by the lack of a true national economic plan. Thus, the Ten Year Plan of Development and Welfare 1946-55 was followed in 1951 by a revised plan covering the period 1951-56. In turn, the report of the mission to Nigeria of the International Bank for Reconstruction and Development, published in 1955, became the basis for the drafting of the federal and regional

1. The most recent census, that of 1963, gives the population of Nigeria as 55.6 million: Northern Nigeria, 29.8 million; Eastern Nigeria, 12.4 million; Western Nigeria, 10.3 million; Midwestern Nigeria (newly created), 2.5 million; and the Federal Territory of Lagos, 0.6 million.

economic programmes covering more or less the period 1955-60. These plans and their revisions, together with the policy statements which accompanied them, were concerned mainly with a collection of projects which the various governments were undertaking. They had no clearly expressed set of priorities within the lines of a general plan for national economic development. The main reason for this lack of integration was the then existing Nigerian political set-up, in which the regions were not prepared to accept formulations which would limit their autonomy of decision and thus infringe their constitutional rights.

Despite this, among the regions a certain unity of objectives, if not of policies, did emerge. For instance, the provision of further facilities for primary education and teacher training ranked high in all regions, with somewhat less emphasis on other types and levels of education. Towards the end of the period, particularly in Eastern and Western Nigeria, these policies changed and secondary and higher education received more attention. Confirmation of these trends is clearly expressed in the analysis of government financing in this study, and also portrayed in Table 4, Figure 2, and in the various tables of Appendix D.

For historical reasons, each region had different administrative arrangements which markedly influenced educational planning and related procedures for financing. In Eastern and Western Nigeria, the various Christian (and for the West, also Moslem) missions retained more or less an educational monopoly, a fact which persuaded each of the governments of these regions to integrate their schools into public systems in which the missions—under the name of voluntary agencies—were guaranteed their rights of proprietorship while at the same time subjected to government control. In Northern Nigeria, the situation was quite different. In the early 1950s the relatively limited number of mission schools in the North, plus the fact that they were operating mainly in the southern provinces of the region and among the immigrant populations of the *sabon garis* (strangers' quarters) of the larger cities, led the government to introduce a distinction between mission schools and native authority schools for purposes of governmental assistance in their development. This policy was later modified, however, and the missions' rights, if not their powers, became comparable with those in Eastern and Western Nigeria.

Various reports have indicated that a striking difference existed between Northern Nigeria, on the one hand, and Eastern and Western Nigeria, on the other, with respect to educational planning. These reports take the view that the North had much clearer objectives and great farsightedness in its programmes of educational development, while those of the East and West were distorted by political interference. These judgements, based on impressions, are not supported by the evidence. As it happened, each region had notable, and orderly, achievements. More to the point is to say that in each region there were setbacks due to lack of suitable organization and of personnel, including field staff; and in each region

there were errors in decisions, inevitable under the circumstances and often brought about by lack of the right kind of information and by unpredictable financial constraints.

Problems in financing widespread primary education

During this period of rapid expansion, certain issues in educational planning became highlighted. Foremost among these is the question of how extensive primary education should be and the methods for its financing. Programmes that were launched in answer to considerable popular demand for free and universal primary education led to unexpectedly heavy expenditures.

The regional governments, which became autonomous in 1954, carried by far the greatest share of this increasing expenditure for education, even though their combined recurrent revenue as a proportion of the total recurrent revenue of the Federation actually fell—from 72 per cent in 1952/53 to slightly over 56 per cent in 1962/63. The governments of Eastern and Western Nigeria, having introduced free primary education programmes, were confronted with abruptly increasing financial commitments without a proportionate rise in internal revenues. These governments faced serious financial trouble. In 1957, for instance, over-all educational expenditures absorbed respectively 43 per cent and 42.6 per cent of their total budgets, while recurrent educational expenditure alone took about half (49 per cent) of the total recurrent budget in the East.

In meeting this problem, the options open to these governments were few. In the event, the government of Western Nigeria was able to obtain help through the resources of the Marketing Boards. The government of Eastern Nigeria, on the other hand, had to retreat temporarily from the full application of the free primary education scheme; and, when re-introduced a few years later, the scheme remained limited to the beginning classes of the schools. Both governments sharply reduced the proportion of their educational expenditures assigned as capital outlays. The percentage of total government expenditure represented by recurrent expenditure for education continued to grow, however, and at the end of the period covered in this study was still 47.3 per cent for the West and 38.2 per cent for the East, the latter region having reduced the number of pupils by raising the age of school entry to 6-plus, and thus shortening the primary school course from eight to seven years. (In 1963 the two top primary classes were merged, thereby further reducing the length of the primary-school course to six years.)

At the end of the period, the total recurrent expenditures for primary schooling were shared by regional governments and local sources (local governments, and direct payments of fees by households) in the ratio of 75:25. This represents a

considerable swing from earlier times when local sources contributed the greater proportion of these costs. At the same time, recurrent expenditures for primary education compared with those for other kinds of formal education (secondary, teacher training, technical and vocational, university) at the regional level, were in the approximate proportion of 60:40, with some variation by region and for the Federal Territory of Lagos. By and large, therefore, the rising expenses of primary schools have been met increasingly by regional governments' funds, with consequent reduction in the funds available for other purposes.

Certainly there is a strong case for devoting a higher proportion of regional expenditures towards meeting the recurrent costs, and paying for the expansion, of other levels of formal education (including courses for upgrading the qualifications of primary-school teachers) and for different types of non-formal education. There is, too, the urgent requirement that more funds be available for moving ahead with meaningful regional programmes of general economic development that can raise more productive work opportunities, and training on the job, for the school leavers—the overwhelming majority—who cannot proceed with formal education beyond the primary stage.

What share of national and regional resources should be used to promote primary education? The answer to this question is very largely a matter of how these expenditures are borne. Additional revenue must be found without at the same time destroying incentives to work and earn. A guiding principle, well tested in many areas in Nigeria in past years, is that families and communities are more willing to contribute towards some purpose which they value highly and which they can intimately appreciate because it is close at hand.

One lesson deriving from this study, therefore, is the need to re-examine the working of the grants-in-aid system as it formerly operated and of its related 'assumed local contribution'. Reviving this system does not necessarily mean re-introducing school fees payable by parents. The method of collection will vary according to local acceptability and practice: the imposition may be on families whose children attend schools, or on the entire community in the form of a specific tax, or part of a general levy embracing other local needs. Discriminatory procedures would help some areas of particularly low money circulation, as well as encourage demand in areas which have little tradition of modern education. On the capital side, thousands of class-rooms, following earlier tradition, can be built and maintained by local contributions in money and labour (under the guidance of local and native authorities, with government standards observed and survey services provided).

Widespread primary education is an acknowledged objective of all governments in Nigeria. Each new year is expected to bring to the labour force recruits—young men and young women—with better general education and training in skills. At present, however, distribution of facilities for primary schooling (by city, town-

ship, and village, and by sections of the Federation) is sharply uneven in relation to population settlement. Thus, taking the Federation as a whole, less than 30 per cent of school-age children complete the full primary-school course. Accordingly, if primary education is to be expanded—even, indeed, by holding to present proportions of school-age children attending schools (with populations rising in recent years at an annual net increase of between 2.5 and 3 per cent)—while not retarding other essential development expenditures, drastic policy action on its financing is inevitable. Although the term has wide currency and an understandable appeal, primary schooling can of course never be 'free': the problem is to judge correctly the most acceptable and desirable procedures for meeting its rising expenditures.

Given these expected increased expenditures for primary education, decentralizing its administration and its financing by strengthening local organization appears to be a prerequisite for expansion of other types and levels of education.

Other issues in educational planning

An economy can develop only in step with a transforming society. A principal means for achieving these co-ordinate changes lies in a many-sided, balanced programme of education, in which both formal and other types of education play their parts. The mapping of a strategy for educational development, in fact, should begin with a broad vision of education as an instrument for releasing people from traditional inhibitions and for turning their creative energies towards continuous self-improvement. Seen in this wider context, education would then be advocated not solely as an affair of year-by-year class-room instruction, however vital this is, but rather as a medium for introducing educational disciplines to the minds of people everywhere—not only of children and youth, but of adults as well.

In Nigeria, a number of government departments, private firms, and voluntary agencies contribute to these other processes of education through extension services, in-service training with small and large economic enterprises, health education, and the like. It is important, then, when planning the amounts and quality of formal education, and related financing, to see the links between it and these other forms of education which may either substitute for, or extend, class-room experience.

The proportion of the nation's resources that can reasonably be spent on education relative to other competing needs (the building of infrastructure, direct help for farms and industries) depends on what is meant by education, and what such education is designed to accomplish, as well as on the nation's determination to mobilize the resources to pay for it. Educational objectives widely accepted in Nigeria are: first, that the necessary high- and middle-level skills be evolved to meet the specific requirements of the growing economy for the years ahead; second, that as soon as possible all children be given equal opportunities for attending

schools at the primary level; third, that education be widely disseminated among receptive adult populations.

This study reveals the very low expenditures of public funds for non-formal education as undertaken through the ministries of education in Nigeria. The chief component of this category, adult education (including both literacy or 'public enlightenment' programmes), received very little attention. In 1962, only £1.5 million was spent for the entire Federation. The role of adult education in the developing society should be re-assessed, bearing in mind the methods for its financing, its likely effects on raising economic productivity, and the recognition of citizenship rights and opportunities.

Allied to this is another issue: the necessity to merge the skills derived from class-room experience with the realities of the economy. For instance, what is the relation between technical and vocational education (the recurrent expenditures of which in 1962 were £1.2 million) and on-the-job training given by public and private establishments? A step-up in technical and vocational education is undoubtedly needed and also better-directed and planned pre-vocational training. Educational needs of the market-place, the farm, and the workshop—when more closely understood—will help to modify costly formal education that may prove to be too class-room oriented.

A further issue raised by this study is the need to search for economies in the running of the existing system of education. Close inquiries should be made into the wide differences among the regions in recurrent costs for the different levels and types of education. To some extent, these causes are referred to in the text of the study. But further detailed investigations need to be undertaken to extend these analyses as a basis for future policy decisions.

Staff salaries account for between 80 and 95 per cent of total recurrent costs of primary education. These costs are affected not only by the number of teachers, but also by changes in their salary scales, in their qualifications, and in pupil/teacher ratios. A central element in the search for economies, therefore, is how to make the best use of teachers' training and abilities. Such an economy drive may lead to the merging of schools: for instance, as a result of interdenominational rivalries of the past some communities are found to have several schools with less than full classes. Again, schools almost everywhere are desperately short of modern equipment for teachers and pupils to work with. Because the cost of upgrading the system is considerable both in teacher-training expenses and the consequent higher cost of improved qualifications, it is vital that full value be obtained by seeing that primary classes are kept as close as possible to maximum size and that teachers be given a chance for expression by using improved media (books, audio-visual aids, basic science materials) suitable for the Nigerian environment.

At the secondary level, an evaluation might suggest that the expensive science laboratories and specialized teaching of one grammar school be effectively shared

by other schools in the same community. Equipment costs of secondary schools, different from the comparatively modest costs of primary schools, are very high.

Another issue of secondary education has to do with equality of opportunity for school attendance. Because fees charged in secondary grammar schools are beyond the means of most families, well-off parents have an extra advantage. Because they are able to afford the fees for their children, they thereby benefit from counterpart government contributions for secondary education. (For the Federation as a whole, 50 per cent of the average recurrent cost per pupil in assisted secondary grammar schools is met by government grant-in-aid.) It is apparent, therefore, that families of low incomes are, to some extent, supporting the educational progress of children of higher-income families. Careful and urgent attention might be given to greater scholarship aid based on merit.

A closer study of financing in the five universities would undoubtedly reveal ways in which economies can be made by concentrating certain faculties at particular universities and thus saving duplications of expensive facilities and teaching staff.

The major economic issues of educational planning are: determining the total of the nation's resources to be used for education, defining their sources (domestic and foreign), distributing this total among the various levels and types of education, and finding the most efficient ways of achieving the highest quality of educational performance. This study provides background documentation for helping to solve these problems. Continuing analyses, however, could best be undertaken within a national educational planning centre.

A note on methodology

THE MAIN DEFINITIONS

For the purpose of this study the following main definitions have been adopted:

Education covers all activities carried out by the ministries of education or other ministries for the purpose of ensuring the operation and expansion of the school system and the supply of additional educational services; all activities carried out by other educational authorities for the same purposes with the recognition or approval of the ministries of education; and all activities carried out by the educational institutions forming the school system.

The *school system* is constituted by the aggregate of all institutions giving education and/or training in the form and according to the schemes laid down by the government educational authorities or by those autonomous institutions (universities) to which such power is delegated by statute.

Education costs are all expenditures incurred by the above-mentioned authorities and institutions for the purpose already stated.

External aid for education is represented by the activities carried out by international and foreign agencies which have established a formal relationship with the government authorities with the purpose of assisting the country in the development of education, as defined above.

These definitions are partly determined by the nature and the extent of the statistical information at our disposal, partly derived from generally accepted concepts and adapted to the Nigerian situation.

The definition of education, for instance, includes activities which are not purely instructional, such as residential facilities, catering, recreational services, health services, transport, etc., but these are considered only when performed by educational authorities or institutions, and similar services otherwise rendered to students and staff members are not considered as educational activities.

The limits of the definition of education, which has a direct bearing on the definitions of school system and education costs, go even further. In fact, such purely educational activities are excluded as those performed by the ministry of health (training of nurses and teaching hospitals), ministry of agriculture (agriculture and veterinary schools), ministry

of transport and communications (training of technical personnel), etc., and those performed by private organizations and individuals not having the status of educational authorities, which include in-service and on-the-job training down to self- and home-teaching.

The definition of school system includes what is generally known as the formal-school system, as well as other institutions properly belonging to the non-formal school system but controlled or assisted by the education authorities. In our case, these institutions are represented by adult education and special schools for handicapped children.

The definition of education costs follows from the definitions of education and school system. The identification of costs with expenditure is also a limitation. In fact, no account is taken of financial costs such as interests, rents and depreciation. Education costs exclude also the economic benefits deriving from external aid activities. The information at our disposal was insufficient to estimate the financial implication of these services in terms of monetary value in the receiving country. In any case, we had serious doubts about the rigorous economic significance of such calculation, which is based on the assumption that external aid represents a measurable saving of internal resources which may be redistributed and its withdrawal has to be compensated by a new redistribution of such resources. As a matter of fact, the receiving country, even when it participates in the decisions concerning the form and the extent of external aid, does not regard this as part of its own national resources, but often as an additional investment of a transitory nature. Its replacement will depend on the financial policies which the country will be able to follow at the time that such aid will cease. In addition, not all external aid needs to be replaced or a corresponding investment continued in the same field.

The definition of external aid is also a limited one. We have considered under this concept only the contributions of officially recognized external aid agencies, excluding, therefore, the activities of religious, cultural and philanthropic organizations whose institutional aims are not those of external aid agencies, though they might render similar services financed abroad. Also excluded are the contributions of the United Kingdom government under the colonial development schemes. In addition, external aid in our definition does not include loans, which are regarded only as a form of income, even if they are contracted under privileged conditions.

THE FINANCE FLOW

A schematic view of the flow of finance to education is shown in the chart on the opposite page.

We have distinguished sources of income from sources of financing—though the distinction might appear irrelevant—in order to maintain the terminology in use which indicates the sources of financing as government—central or local—and private. Sources of income indicate, therefore, the income flow to the sources of financing.

The sources of financing are also the allocators of finance and the recipients of finance are the public authorities and private agencies or individuals engaged in educational activities. The distinction between sources of financing and recipients of finance, however, does not apply in the case of private agencies and individuals.

The recipients of finance are also the spending bodies, and the users of finance the final consumers.

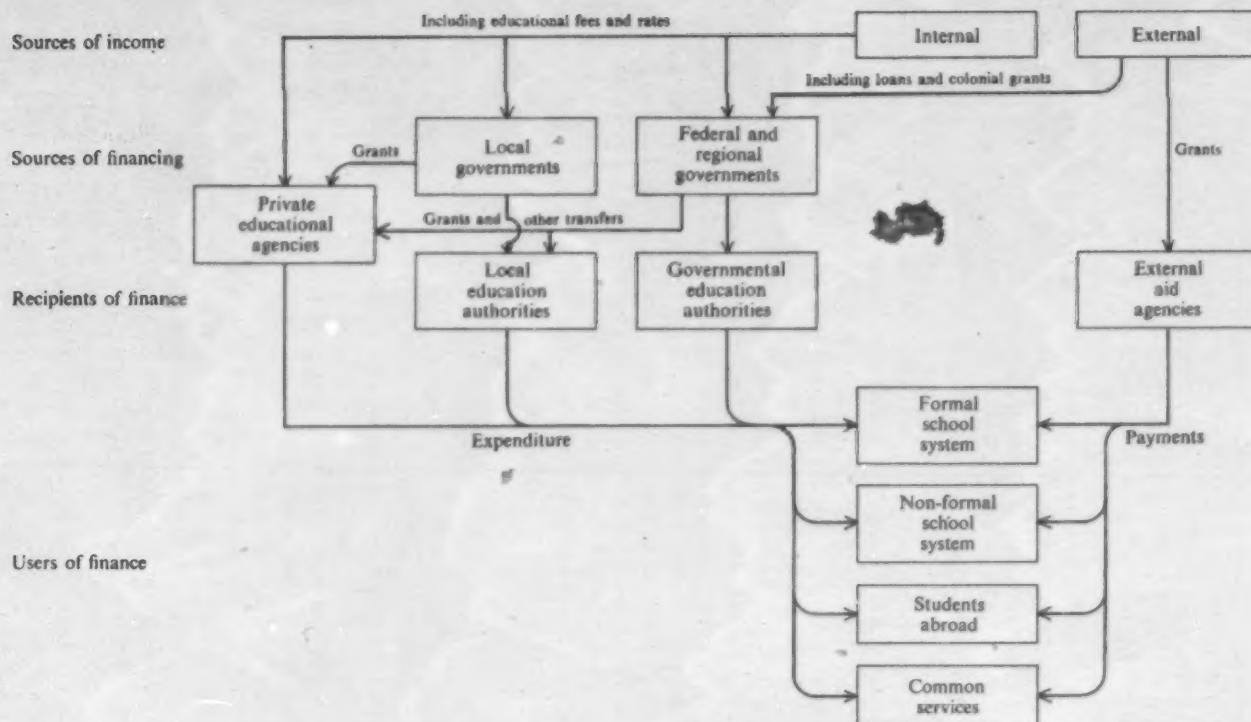


FIGURE 3. Schematic view of the flow of finance for education in Nigeria

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Income flows to the financing bodies through the usual channels which are represented by (a) the collection of taxes and other forms of internal revenue, and by loans and other transfers received from abroad, by central and local governments, and (b) fees and other income paid to public educational authorities and private agencies and individuals. The amount devoted to education from aggregate (a) has been regarded as financing from internal public sources and the amount of aggregate (b) as internal private sources. In practice, from total disbursements for educational purposes made by public authorities the amount of educational fees paid to them has been subtracted and added to the expenditure aggregate of private educational agencies and individuals. The part of external income disbursed through aid agencies has been considered as the aggregate of external sources of financing.

In order to understand the exact content of these aggregates, the following remarks are necessary: (a) internal public sources include the part redistributed to education of (i) loans and grants received from abroad (i.e., colonial grants), (ii) funds raised from Marketing Boards, and (iii) funds raised from education rates by local government authorities; (b) internal private sources include funds received by private agencies and individuals from abroad directly and not through an external aid agency; (c) external sources include only disbursements of external funds made through external aid agencies.

A further distinction has been made between government and local sources. Government sources are the aggregate of the disbursements for educational purposes made by federal and regional government authorities. Local sources are the disbursements made for educational purposes by local authorities and private agencies and individuals.

As regards the use of educational finance, this has been distinguished between formal and non-formal school system, students abroad and common services, this latter including administration, examinations, school libraries, health services, etc., but excluding that part of such services directly carried out by educational institutions.

THE PERIOD UNDER REVIEW

The statistical information on which the present study is mainly based extends over a period of eleven years which includes the financial years 1952/53 to 1962/63. This is an extremely significant period from the point of view of educational development and of related financial policies.

During this period educational plans were formulated and carried out all over the country, at both the federal and regional levels, and government authorities played the major role in attempts to unify and rationalize the whole school system.

In 1952, the main lines of educational development, which involved an increasing financial participation by governments, were already defined, and important decisions were taken at dates quite close to the starting point of our analysis. The acceptance by the central government of the recommendations of the Phillipson report, which were included in the 1948 Education Ordinance and the 1949 Education Regulations, was undoubtedly the most consequential of these decisions for financing. Grants-in-aid as a basic tool of educational development have been reviewed fully in this report. In the years that followed grants-in-aid became an increasingly significant item in governments' expenditures.

Other important decisions, however, were taken at the turn of the decade which also increased the size of government financial participation, such as (a) the policies introduced with sessional paper no. 6 of 1951, which gave the start to a number of government projects in the field of secondary and technical education and teacher training, absorbing a large part of government direct expenditure, both recurrent and capital; (b) the decisions concerning the financing of the newly established University of Ibadan (1949) and the Nigerian College of Arts, Science and Technology (1953); and (c) the starting of a nigerianization programme (1950) which boosted the number of scholarships awarded at the federal and regional levels.

A further, and commanding, reason for the significance of this period in giving perspective to present-day educational planning is to be found in the introduction of regionalization in October 1954. Under this new régime, the bulk of financial commitments was shifted to the regional governments and therefore all the problems of financing had to be re-dimensioned at the regional level. As education was and remained a field of major government investment, much of its progress and setbacks may be viewed as a reflexion of the problems created by regionalization.

GOVERNMENT EXPENDITURE

The accountant-generals' reports, which include the closed accounts of government expenditure for each financial year ending 31 March, were the main documents from which the data concerning this aggregate have been processed. All items of expenditure were classified by means of a simple three-digit code according to the following aspects:

1. By type of investment: (a) recurrent expenditure, including all payments of a recurrent nature according to the Unesco definition;¹ (b) capital expenditure, including all expenditure considered as capital outlay according to the Unesco definition.²
2. By mode of payment: (a) direct expenditure, including all transactions for the acquisition of goods and services, namely all expenditure incurred for (i) the ministries of education and their dependent units, and (ii) government educational institutions; (b) grants-in-aid, including all payments made to voluntary agencies or local and native authorities under this head, and other payments which, though not specifically mentioned in the accounts as grants-in-aid, were manifestly made for educational institutions operated by them; (c) scholarships, including all payments made under this head and, in addition, those payments which constituted a direct aid given by government to students. For higher education, a further distinction was made for scholarships tenable in Nigeria and West Africa and those tenable abroad; (d) subventions and subsidies, including all payments made under this head and all other contributions by the ministries of education to autonomous organizations active in the field of education.
3. By type of education: (a) primary education, (b) secondary education, (c) teacher training, (d) technical and vocational education, (e) higher education, and (f) adult education. Only expenditure relating to educational institutions was classified by type of education.

1. Unesco, *Manual of Education Statistics*, Paris, 1961, pp. 212-3.

2. *Ibid.*

EXPENDITURE BY LOCAL AND NATIVE AUTHORITIES

The basic documents utilized for this aggregate were the accounts on local finance published by the ministries of local government in the various regions and by the city council in Lagos. These documents were not complete in all regions, especially for the first few years of the period under review, and the final series had to be integrated with estimates.

The basic tables derived from these documents—one for each region and one for Lagos township—included the following information, for each financial year ended 31 March:

A. Revenue

1. Federal or regional government
 - (a) Recurrent grants
 - (b) Capital grants
2. Fees

B. Total expenditure

1. Recurrent
 - (a) General expenses
 - (b) Primary education
 - (c) Secondary education
 - (d) Teacher training
 - (e) Technical and vocational education
 - (f) Higher education
 - (g) Adult education
2. Capital

The series of data obtained by subtracting the revenue aggregate from total expenditure was called 'net total expenditure' and represented the direct contribution by local and native authorities. Transfer payments between native authorities in the Northern Region were not included in order to avoid duplications. For the Eastern Region, the revenue collected from education rates was also processed, but not used for determining net expenditure. Education rates were, in fact, treated as ordinary revenue of the local government and not as a private source of financing.

The expenditure items shown in the local government accounts were classified according to the specifications contained in the budgets.

PRIVATE EXPENDITURE

There were no statistics showing expenditure by private educational institutions and this aggregate had, therefore, to be estimated for the whole period under review. Capital expenditure, however, was excluded from the estimates as there was no firm point on which to rely. The exercise was carried out for recurrent expenditure only, as incurred by the three types of educational institutions forming the assisted and non-assisted private sectors, i.e., primary schools, secondary schools, and teacher-training colleges. The expenditure of the private assisted sector and private non-assisted sector were estimated separately.

Recurrent expenditure of the private assisted sector was assumed to be equal to the amount of recurrent grants received from public sources plus fees paid by private indivi-

duals, and no account was taken of individual expenses other than fees. Total recurrent expenditure from private sources was assumed to be equal to the total amount of fees paid less grants received by students in the form of scholarships.

The procedure followed for estimating the amount of fees paid to private institutions of the assisted sector was based on the following considerations. (a) Government grants were supposed to cover the cost of teachers' salaries less a deduction represented by the net balance between assumed local contributions and capitation grants; (b) All other expenses covering instructional costs other than teachers' salaries, non-instructional costs such as administrative and maintenance costs, students' subsistence and that part of teachers' salaries not met by government grants were supposed to be covered by fees.

The series of government grants to private educational institutions of the assisted sector was obtained by subtracting grants paid to local authorities from the total amount of grants paid by government authorities. The figures obtained were apportioned to each type of school, taking into account the size of their enrolments and the average grant paid per pupil or student in each type of school in the whole assisted sector.

A positive correlation was assumed to exist between: (a) total recurrent expenditure of the private assisted sector, and (b) net deduction for assumed local contributions.

A negative correlation was assumed to exist between: (a) total recurrent expenditure of the private assisted sector, and (b) government grants to the private assisted sector.

This meant that (i) a rise in the amount of government grants per pupil or student would cause a decline in the amount of average fees paid, and vice versa; (ii) a rise in the amount of net deduction for assumed local contribution would cause a rise in the amount of average fees paid and vice versa.

In addition, average fees paid were assumed to rise by 2 per cent a year as a consequence of increasing costs other than teachers' salaries. The ratio between boarding and non-boarding students in secondary schools and teacher-training colleges, which would also have affected the level of average fees paid, was assumed to have remained constant.

Starting from the average fees paid in 1963 in secondary schools and teacher-training colleges as reconstructed from inquiries and reports available in the regions, the ideal series of total expenditure in the private assisted sector were reconstructed backwards. For primary education, it was assumed that fees paid to educational institutions equalled the net deduction for assumed local contributions and consequently that in the regions where a free primary education system existed, no contributions were required from private sources and the total cost was equal to government grants plus net expenditure by local authorities.

The ideal series thus obtained were then checked and analysed for their consistency in reflecting changes in financial policies and the contributions of the various sources of financing. When inconsistencies were found, the series were subjected to reasoned adjustments, utilizing the information available in the reports dealing with the periods concerned.

There was another problem represented by the fact that government and local expenditure referred to the financial year while private expenditure was incurred during the school year which coincided with the calendar year. In this case no adjustments were made and it was only assumed that grants paid in each financial year were expended in the calendar year in which the financial year began. For instance, grants paid in 1952/53 were

assumed to have been expended in the calendar year 1952, and so on. The advance payments usually made at the end of the preceding financial year were assumed to be compensated.

Expenditure for the non-assisted private sector was roughly calculated by multiplying the average fee paid in the assisted sector by the number of enrolments.

Appendixes

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- TABLE 1. Gross domestic product and gross capital formation in Nigeria, 1952-62
- TABLE 2. Education as compared with consumers' expenditure
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- TABLE 7. Enrolments in primary schools, 1952-63
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- TABLE 12. Estimated total recurrent expenditure for education financed from internal sources, 1952/62
 - a. Federation of Nigeria
 - b. Northern Nigeria
 - c. Eastern Nigeria
 - d. Western Nigeria
 - e. Lagos
 - f. Universities and higher institutions

TABLE 13. Estimated recurrent expenditure for education from public sources, 1952-62

- a. Federation of Nigeria
- b. Northern Nigeria
- c. Eastern Nigeria
- d. Western Nigeria
- e. Federal government

TABLE 14. Estimated total recurrent expenditure from internal sources, 1952-62

- a. Primary schools
- b. Secondary schools
- c. Teacher training

APPENDIX D

TABLE 15. Government total expenditure for education, 1952-62

TABLE 16. Government direct expenditure and transfer payments for education, 1952-62

- a. Northern Nigeria
- b. Eastern Nigeria
- c. Western Nigeria
- d. Federal government
- e. All governments

TABLE 17. Government expenditure for education, by type and level, 1952-62

- a. Recurrent
- b. Capital
- c. Recurrent and capital

TABLE 18. Government expenditure for primary education, 1952-62

TABLE 19. Government expenditure for secondary education, 1952-62

TABLE 20. Government expenditure for teacher training, 1952-62

TABLE 21. Government expenditure for technical and vocational education, 1952-62

APPENDIX A

TABLE 1. Gross domestic product and gross capital formation in Nigeria, 1952-62 (in £ thousand)

Year	Gross domestic product (at factor cost)			Gross capital formation			
	at 1957 prices		at current prices	at 1957 prices		at current prices	
	NNA	FOS	(NNA)	NNA	FOS	NNA	FOS
1952	793.5	.	614.5	75.0	(65.9)	54.0	(47.5)
1953	811.6	.	665.0	79.9	(70.2)	58.8	(51.7)
1954	872.1	.	774.2	92.9	(81.6)	71.5	(62.8)
1955	895.2	.	827.5	102.6	(90.2)	85.7	(75.3)
1956	873.7	.	870.6	108.0	(94.9)	101.2	(88.9)
1957	910.0	.	910.0	113.0	99.3	113.0	99.3
1958	.	900.0	.	.	108.5	.	109.2
1959	.	938.5	.	.	127.3	.	122.8
1960	.	981.3	.	.	126.9	.	129.1
1961	.	1 014.0	.	.	140.1	.	152.5
1962	.	1 072.3	.	.	137.1	.	159.8

NOTES

NNA *The Nigerian National Accounts, 1950-57*,
by P.N.C. Okigbo, Lagos, 1962

FOS Federal Office of Statistics, Lagos

Figures in brackets have been derived through chain
indices linked to 1957 figures

TABLE 2. Education as compared with consumers' expenditure (in £ million)

Year	Consumers' expenditure (NNA)						Gross domestic product		
	at 1957 prices			at current retail prices			(at factor cost) at 1957 prices (PR)		
	Total Education	%		Total Education	%		Total Education	%	
1952	695.9	8.6	1.24	536.5	4.0	0.75	.	.	.
1953	717.3	8.9	1.24	580.3	5.5	0.95	.	.	.
1954	774.6	10.1	1.30	673.3	6.8	1.01	.	.	.
1955	805.5	13.7	1.70	743.1	12.0	1.61	.	.	.
1956	798.9	15.4	1.93	792.7	15.2	1.92	.	.	.
1957	815.5	19.8	2.43	815.5	19.8	2.43	.	.	.
1958	.	.	.	.	.	.	900.0	19.8	2.20
1959	.	.	.	.	.	.	938.5	23.1	2.46
1960	.	.	.	.	.	.	981.3	25.0	2.55
1961	.	.	.	.	.	.	1 014.0	27.0	2.66
1962	.	.	.	.	.	.	1 072.3	30.0	2.80

NOTES

NNA (See note to Table 1.)

PR National Development Plan — Progress
Report, 1964

Reliability of estimates given as 'fair' or subject to
errors ranging between 10 per cent and 20 per cent

TABLE 3. Federal and regional governments' revenue, 1952/53 to 1962/63 (in £ million)

Financial year	Current revenue				Grants		Loans	
	Federal	Regional ¹	Total	of which external ²	Federal ³	Regional ⁴	Federal	Regional
1952/53	50.9	2.1	53.0	2.9	.	.	.	.
1953/54	59.3	4.2	63.5	3.0	.	.	.	.
1954/55	62.5	8.1	70.6	2.7	.	.	.	.
1955/56	60.0	9.6	69.6	3.7	.	.	2.0	...
1956/57	70.6	14.8	85.4	1.9	...	23.3	9.3	13.5
1957/58	70.9	14.2	85.1	1.9	1.1	3.3	...	2.5
1958/59	77.3	15.9	93.2	0.9	0.8	2.4	3.8	2.0
1959/60	88.8	15.2	104.0	.	0.5	4.2	6.7	3.4
1960/61	111.9	14.7	126.6	.	1.0	14.1	21.1	9.6
1961/62	114.5	20.6	135.1	.	0.1	0.3	16.2	5.8
1962/63	115.3	24.8	140.1	.	0.5	0.4	21.4	3.6

NOTES

1. Excluding federal sources
 2. Grants from the Colonial Development and Welfare Scheme and the International Co-operation Administration
 3. External only
 4. From both external and internal sources
- ... Not applicable
... Data not available

SOURCE

Annual Abstract of Statistics, 1964,
Lagos, Federal Office of Statistics

TABLE 4. Federal and regional governments' expenditure, 1952/53 (in £ million)

Financial year	Recurrent			Capital development fund		
	Federal	Regional ¹	Total	Federal	Regional	Total
1952/53	25.9	14.0	39.9	.	.	.
1953/54	36.9	17.3	54.2	.	.	.
1954/55	31.1	26.8	57.9	.	.	.
1955/56	29.2	34.4	63.6	.	.	.
1956/57	26.0	39.6	65.6	12.7	15.6	28.3
1957/58	30.5	39.1	69.6	17.1	10.2	27.3
1958/59	35.0	38.4	73.4	28.1	12.6	40.7
1959/60	40.3	49.6	89.9	35.8	21.0	56.8
1960/61	40.7	54.8	95.5	48.1	25.1	73.2
1961/62	54.2	62.8	117.0	32.0	31.1	63.1
1962/63	60.3	67.6	127.9	40.7	31.8	72.5

NOTE

1. Including payments into the capital development fund from the current accounts

SOURCE

Annual Abstract of Statistics, 1964

TABLE 5. Economic analysis of combined federal and regional governments' budgets, 1955/56 to 1961/62 (in £ million)

a. Revenue

Item	1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62
<i>Current account</i>							
Income from taxes	55.1	63.7	64.5	70.7	77.3	89.6	96.1
Income from property	4.4	6.2	7.9	8.1	9.9	16.8	18.7
Transfers from overseas	3.8	1.9	...	...	...	0.1	...
Other transfers	2.8	4.2	3.1	2.7	3.4	2.1	4.2
Other revenue	4.1	5.7	5.3	4.9	5.3	7.7	7.0
Total	70.2	81.7	80.8	86.4	95.9	116.3	126.0
<i>Capital account</i>							
Surplus on current account	11.7	10.5	12.6	24.0	18.6	25.6	28.2
Appropriations	9.4	13.0	7.2				
Loans	2.0	21.8	2.5	5.8	10.7	29.0	24.6
External grants	.	0.2	3.0	3.0	3.4	2.2	0.3
Special grants	.	10.3	.	.	1.6	13.3	.
Other capital receipts	0.4	0.5	0.6	2.0	0.5	2.2	2.5
Total	23.5	56.3	25.9	34.8	34.8	72.3	55.6

b. Expenditure

Item	1955/56	1956/57	1957/58	1958/59	1959/60	1960/61	1961/62
<i>Recurrent</i>							
Direct expenditure	31.7	33.6	36.0	41.4	52.3	58.9	64.2
Grant transfers	14.6	20.7	19.4	17.6	20.8	27.1	26.7
Other transfers	1.9	2.6	3.3	1.4	1.4	0.9	1.0
Interest	1.0	1.2	2.3	2.0	2.8	3.8	5.2
Appropriations	9.3	13.1	7.2	11.0	10.3	11.7	16.5
Total	58.5	71.2	68.2	73.4	87.6	102.4	113.6
<i>Capital</i>							
Direct expenditure (GFCF) ¹	16.5	22.0	24.0	32.4	43.3	45.8	45.4
Grant transfers	.	.	4.1	4.3	1.6	1.9	3.0
Loans	4.0	3.1	2.0	9.0	11.1	15.9	15.8
Other payments	0.3	0.3	1.8	0.4	0.6	1.4	2.9
Total	20.8	25.4	31.9	46.1	56.6	65.0	67.1

NOTES

... Not applicable
 ... Data not available

1. Gross fixed capital formation

SOURCE

Annual Abstract of Statistics, 1964

(Table: 'An economic analysis of government accounts, 1957-58, including comparison over the period 1955-56 to 1958-59')

TABLE 6. Expenditure of regional governments, 1955/56 to 1962/63 (in £ million)

Financial year	Recurrent ¹			Capital ²		
	Northern Region	Eastern Region	Western Region	Northern Region	Eastern Region	Western Region
1955/56	8.3	5.7	10.4	3.6	1.1	4.6
1956/57	9.5	10.8	12.8	5.9	1.8	3.6
1957/58	10.6	11.3	12.0	6.8	2.1	4.1
1958/59	11.6	10.3	14.0	6.9	3.4	6.4
1959/60	13.3	12.8	17.3	7.1	4.4	11.8
1960/61	16.9	15.1	20.8	5.9	4.2	13.7
1961/62	18.5	16.8	20.1	9.0	9.0	13.3
1962/63	20.9	17.7	20.5	7.4	9.9	14.4

NOTES

1. Excluding appropriations to funds
2. Excluding loans and financial investments

SOURCE

Reconciliation of data from the following publications: 1. *Annual Abstract of Statistics, 1964* (Federal); 2. *Annual Abstract of Statistics, 1964* (Northern Nigeria); 3. 'An Economic Analysis of Government Accounts, 1957-58' a cyclo-styled document of the Federal Office of Statistics, Lagos; 4. International Development Association, 'Report on Proposed Development Credit to Federal Republic of Nigeria', 1964, an unpublished document

APPENDIX B

TABLE 7. Enrolments in primary schools, 1952-63 (in thousands)

Year	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
1952	122.1	518.9	400.0 ¹	2	1 041.0
1953	142.5	572.7	429.5	2	1 144.7
1954	153.7	664.7	456.6	2	1 275.0
1955	168.5	742.6	811.4	37.0	1 759.5
1956	185.5	904.2	908.0	38.6	2 036.3
1957	205.8	1 209.2	982.7	50.2	2 447.9
1958	229.1	1 221.5	1 037.4	56.7	2 544.7
1959	250.9	1 378.4	1 080.3	66.3	2 775.9
1960	282.8	1 430.5	1 124.8	74.5	2 912.6
1961	316.2	1 274.4	1 131.4	81.8	2 803.8
1962	359.9	1 266.6	1 109.0	98.5	2 834.0
1963	410.7	1 278.7	1 099.4	107.6	2 896.4

NOTES

1. Estimated
2. Lagos was part of the Western Region

SOURCES

Federal and regional annual reports and statistical abstracts

TABLE 8. Enrolments in secondary schools, 1952-63 (in thousands)

Year	Northern Region	Eastern Region ¹	Western Region		Lagos ¹	All of Nigeria
			Grammar ²	Modern		
1952	1.9	8.6	6.5 ³	.	0.3 ³	17.3
1953	2.1	9.2	7.3	.	0.3 ³	18.9
1954	2.4	9.5	9.3	.	0.3 ³	21.5
1955	2.7	10.6	10.9	4.4	2.6	31.2
1956	3.3	11.0	12.6	12.8	2.8 ³	42.5
1957	3.7	12.2	16.2	30.6	2.9 ³	65.6
1958	4.1	14.0	18.9	43.5	3.1	83.6
1959	4.7	15.8	22.7	64.2	3.3 ³	110.7
1960	6.3	18.3	26.1	75.1	3.6	129.4
1961	6.5	21.3	29.8	98.9	4.7	161.2
1962	8.0	27.6	34.5	110.3	5.5	185.9
1963	9.9	34.7	39.9	110.8	5.7	201.0

NOTES

1. Excluding commercial and modern schools
2. Including commercial schools
3. Estimated

SOURCES

Federal and regional annual reports and statistical abstracts

TABLE 9. Enrolments in teacher-training colleges, 1952-63

Year	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
1952	1 794	2 509	...	.	..
1953	1 942	...	...	.	...
1954	1 924	...	4 991	...	...
1955	1 946	...	6 752	43	...
1956	2 314	8 356	9 140	...	...
1957	2 562	...	10 446	129	...
1958	3 047	11 067	10 737	207	25 058
1959	3 254	11 772	10 992	434	26 452
1960	4 112	12 013	11 265	476	27 866
1961	4 668	11 987	12 218	563	29 436
1962	6 183	11 158	12 779	591	30 711
1963	7 773	10 685	12 818	780	32 056

NOTES
 . Not applicable
 ... Data not available

SOURCES
 Federal and regional annual reports and statistical abstracts

TABLE 10. Enrolments in government technical and vocational institutions, 1952-63¹

Year	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
1952	137	162	.	402	701
1953	309	...	.	...	...
1954	535	...	.	...	...
1955	643	...	.	605	...
1956	737	...	.	...	...
1957	872	...	...	...	...
1958	965	...	...	795	...
1959	1 309	285	148	830	2 570
1960	2 012	381	184	999	3 586
1961	2 401	470	454	962	4 287
1962	2 608	522	736	956	4 822
1963	2 658	659	770 ²	1 142	5 229

NOTES
 1. Full-time students only
 2. Excluding Midwestern Region
 . Not applicable
 ... Data not available

SOURCES
 Federal and regional annual reports and statistical abstracts

TABLE 11. Enrolments in universities and higher institutions, academic years 1952/53 to 1963/64

Academic year	University College, Ibadan	NCAST ¹	University of Nigeria, Nsukka	Ahmadu Bello University	University of Ife	University of Lagos	Total
1952/53	368	...	.	.	.	.	...
1953/54	407	...	.	.	.	.	...
1954/55	476	...	.	.	.	.	...
1955/56	523	...	.	.	.	.	...
1956/57	563	...	.	.	.	.	...
1957/58	754	701	.	.	.	.	1 455
1958/59	940	866	.	.	.	.	1 806
1959/60	1 024	1 088	.	.	.	.	2 112
1960/61	1 136	1 050	259	.	.	.	2 445
1961/62	1 504	722	905	.	.	.	3 128
1962/63	1 688	.	1 148	426	244	100	3 606
1963/64	2 016	.	1 828	558	475	271	5 148

NOTES

1. Nigerian College of Arts, Science and Technology (with branches in Ibadan, Enugu and Zaria), including the faculty of engineering sponsored by University College, Ibadan

Not applicable

... Data not available

SOURCES

University reports and federal statistical abstracts

TABLE 12. Estimated total recurrent expenditure for education from internal sources, 1952-62 (in £ thousand)

a. Federation of Nigeria

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Other	Total
1952	3 895.4	1 174.4	746.9	308.2	674.0	285.1	13.2	7 097.2
1953	4 525.7	1 390.4	844.2	299.3	874.7	332.0	92.5	8 358.8
1954	5 970.8	1 541.0	994.9	319.6	1 173.5	450.1	122.9	10 572.8
1955	6 901.4	1 974.6	1 164.0	368.4	1 592.4	557.2	164.5	12 722.5
1956	8 978.5	2 400.4	1 600.3	467.2	1 889.8	650.8	181.8	16 168.8
1957	10 241.5	2 800.5	1 863.1	557.5	2 090.5	739.8	193.7	18 486.6
1958	11 145.4	3 330.2	1 987.5	654.4	2 332.7	833.6	194.2	20 478.0
1959	13 378.9	3 907.4	2 345.1	840.0	2 644.5	916.1	197.7	24 229.7
1960	16 363.8	5 191.6	2 715.4	1 055.2	3 095.2	1 117.4	192.7	29 731.3
1961	15 951.2	5 961.0	3 056.3	1 145.5	3 921.3	1 142.0	175.8	31 353.1
1962	16 247.6	7 233.2	3 425.5	1 255.0	5 305.8	1 304.7	192.8	34 964.6

b. Northern Nigeria

1952	545.0	161.8	250.6	98.6	26.7	71.4	.	1 154.1
1953	867.8	230.7	255.5	96.6	29.7	97.3	64.9	1 642.5
1954	925.3	300.5	281.7	117.2	53.3	126.8	85.5	1 890.3
1955	1 080.9	395.5	329.6	130.6	71.0	171.7	108.5	2 287.8
1956	1 434.1	545.7	457.7	190.2	71.8	173.8	107.5	2 980.8
1957	1 502.1	582.5	468.0	217.4	77.0	177.9	116.9	3 141.8
1958	1 612.7	628.0	545.5	274.5	85.2	197.5	92.6	3 436.0
1959	1 837.6	705.3	608.2	347.7	107.9	199.3	92.1	3 898.1
1960	2 150.1	894.7	771.0	425.1	124.8	250.7	98.6	4 715.0
1961	2 314.5	929.5	878.6	430.6	173.4	216.5	48.3	4 991.4
1962	2 671.7	1 118.9	1 151.8	440.4	825.0	287.1	77.6	6 572.5

TABLE 12 (continued)

c. Eastern Nigeria

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Total
1952	1 541.4	468.1	222.5	64.1	32.0	72.0	2 600.1
1953	1 925.9	502.9	241.7	76.0	65.1	74.3	2 885.9
1954	2 243.5	535.4	309.0	74.8	62.8	75.7	3 301.2
1955	2 516.6	556.4	318.5	69.2	124.5	67.9	3 653.1
1956	3 862.6	683.2	493.4	68.2	134.9	108.3	5 350.6
1957	4 621.5	722.4	603.3	91.3	146.4	137.0	6 321.9
1958	4 827.2	829.5	619.8	93.1	157.3	158.6	6 685.5
1959	5 713.4	951.3	792.6	104.4	172.0	176.9	7 910.6
1960	6 573.8	1 260.6	882.0	158.6	115.9	197.6	9 188.5
1961	6 277.8	1 376.5	976.6	214.5	98.2	248.4	9 192.0
1962	6 244.5	1 719.5	912.5	272.1	80.8	291.8	9 521.2

d. Western Nigeria

Year	Primary	Secondary		Teacher training	Technical and vocational	Higher	Administration	Total
		Modern	Grammar					
1952	1 478.6	.	393.0	273.8	143.3	6.1	99.3	2 394.1
1953	1 587.8	.	488.6	347.0	118.4	51.3	124.4	2 717.5
1954	2 610.7	5.1	508.4	404.2	69.2	93.3	195.5	3 886.4
1955	3 089.4	78.9	722.8	510.1	44.2	148.1	271.4	4 864.9
1956	3 383.3	166.0	763.5	623.2	77.6	213.5	314.2	5 541.3
1957	3 702.9	295.2	872.6	759.7	102.1	200.0	334.6	6 267.1
1958	4 251.8	421.5	1 082.0	774.8	116.2	147.3	353.9	7 147.5
1959	5 313.4	622.0	1 209.8	883.2	172.8	153.6	395.6	8 750.4
1960	6 887.4	777.5	1 742.4	994.4	230.4	124.5	495.2	11 251.8
1961	6 564.7	1 051.5	1 922.4	1 106.9	256.4	125.0	489.0	11 515.9
1962	6 359.9	1 208.9	2 400.3	1 222.7	294.7	113.4	524.5	12 124.4

TABLE 12 (continued)

e. Lagos

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Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Other	Total
1952	130.4	151.5	.	2.2	169.2	42.4	13.2	508.9
1953	144.2	168.2	.	8.3	154.7	36.0	27.6	539.0
1954	191.3	191.6	.	38.4	188.4	52.1	37.4	719.2
1955	214.5	221.0	5.8	124.4	182.5	46.2	56.0	850.4
1956	298.5	242.0	26.0	131.2	175.1	54.5	74.3	1 001.6
1957	415.0	327.8	32.1	146.7	222.6	90.3	76.8	1 311.3
1958	453.7	369.2	47.4	170.6	349.1	123.6	101.6	1 615.2
1959	514.5	419.0	61.1	215.1	387.4	144.3	105.6	1 847.0
1960	752.5	516.4	68.0	241.1	599.9	173.9	94.1	2 445.9
1961	794.2	681.1	94.2	244.0	949.7	188.1	127.5	3 078.8
1962	971.5	785.6	138.5	247.8	1 076.8	201.3	15.2	3 536.7

f. Universities and higher institutions

Year	University of Ibadan	NCAST ¹	University of Nigeria, Nsukka	Ahmadu Bello University	University of Ife	University of Lagos	Total
1952	370.0	70.0	.	.	.	.	440.0
1953	403.9	170.0	.	.	.	.	573.9
1954	468.2	307.5	.	.	.	.	775.7
1955	568.8	497.5	.	.	.	.	1 066.3
1956	704.5	590.0	.	.	.	.	1 294.5
1957	829.5	615.0	.	.	.	.	1 444.5
1958	926.3	667.5	.	.	.	.	1 593.8
1959	1 039.8	727.5	56.3	.	.	.	1 823.6
1960	1 214.2	775.0	140.9	.	.	.	2 130.1
1961	1 431.8	797.5	345.7	.	.	.	2 575.0
1962	1 668.1	.	751.5	572.5	175.0	42.7	3 209.8

NOTE

1. Nigerian College of Arts, Science and Technology

TABLE 13. Estimated recurrent expenditure for education financed from public sources, 1952-62 (in £ thousand)

a. Federation of Nigeria

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Other	Total
1952	2 553.8	576.4	594.9	308.2	680.8	285.1	13.2	5 012.4
1953	3 089.2	776.1	603.9	299.3	833.5	332.0	92.5	6 116.5
1954	4 524.8	922.9	837.7	319.6	1 186.4	450.1	122.9	8 364.4
1955	6 076.8	1 123.0	975.6	368.4	1 535.0	557.2	164.5	10 800.5
1956	8 259.9	1 448.3	1 417.3	467.2	1 603.8	650.8	181.8	14 029.1
1957	10 005.8	1 567.8	1 657.4	557.5	1 507.9	739.8	193.7	16 229.9
1958	9 914.7	1 680.5	1 711.9	654.4	2 001.9	833.6	194.2	16 991.2
1959	12 316.4	1 957.9	2 054.3	840.0	2 099.3	916.1	197.7	20 381.7
1960	15 354.1	2 500.0	2 432.2	1 055.2	2 554.5	1 117.4	192.7	25 206.1
1961	14 945.0	2 907.7	2 697.4	1 145.5	3 263.2	1 142.0	175.8	26 276.6
1962	14 539.4	3 376.7	3 187.1	1 255.0	4 698.9	1 304.7	192.8	28 554.6

b. Northern Nigeria

1952	417.4	135.5	191.1	98.6	34.5	71.4	.	948.5
1953	585.0	199.3	192.9	96.6	43.6	97.3	64.9	1 279.6
1954	708.0	295.1	225.8	117.2	91.2	126.8	85.5	1 649.6
1955	842.9	346.5	278.3	130.6	116.1	171.7	108.5	1 994.4
1956	1 249.8	477.8	450.9	190.2	127.0	173.8	107.5	2 777.0
1957	1 352.8	485.2	460.9	217.4	122.4	177.9	116.9	2 933.5
1958	1 490.0	546.8	545.5	274.5	151.4	197.5	92.6	3 298.3
1959	1 751.5	596.1	601.5	347.7	196.4	199.3	92.1	3 784.6
1960	2 013.6	761.0	761.9	425.1	211.5	250.7	98.6	4 522.4
1961	2 113.2	757.3	866.3	430.6	258.4	216.5	48.3	4 690.6
1962	2 375.5	884.7	1 138.7	440.4	317.3	287.1	77.6	5 521.3

TABLE 13. (continued)

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c. Eastern Nigeria

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Total
1952	1 075.6	185.7	209.7	64.1	42.4	72.0	1 649.5
1953	1 328.9	209.8	228.4	76.0	83.3	74.3	2 000.7
1954	1 549.5	234.3	289.0	74.8	80.4	75.7	2 303.7
1955	2 029.7	249.2	280.7	69.2	155.1	67.9	2 851.8
1956	3 438.1	373.9	431.8	68.2	166.2	108.3	4 606.5
1957	4 556.7	411.8	558.5	91.3	178.7	137.0	5 934.0
1958	3 736.8	324.7	502.1	93.1	186.9	158.6	5 002.2
1959	4 749.5	440.9	694.4	104.4	200.3	176.9	6 366.4
1960	5 721.7	547.6	774.0	158.6	195.3	197.6	7 596.8
1961	5 541.4	773.5	853.6	214.5	188.5	248.4	7 819.9
1962	4 907.7	806.3	808.3	272.1	424.3	291.8	7 510.5

d. Western Nigeria

Year	Primary	Secondary		Teacher training	Technical and vocational	Higher	Administration	Total
		Modern	Grammar					
1952	995.6		210.8	194.1	143.3	17.4	99.3	1 660.5
1953	1 104.4		305.7	272.6	118.4	63.9	124.4	1 989.4
1954	2 168.0	5.1	309.3	322.9	69.2	120.3	195.5	3 190.3
1955	3 089.4	41.1	384.9	410.8	44.2	177.4	271.4	4 419.2
1956	3 383.3	76.4	416.1	488.6	77.6	245.2	314.2	5 001.4
1957	3 702.9	65.2	462.8	605.9	102.1	222.7	334.6	5 496.2
1958	4 251.8	73.4	554.6	616.9	116.2	196.2	353.9	6 163.0
1959	5 313.4	76.2	629.1	697.3	172.8	181.1	395.6	7 465.5
1960	6 887.4	101.3	855.5	828.3	230.4	188.0	495.2	9 586.1
1961	6 564.7	111.5	919.7	883.3	256.4	207.9	489.0	9 432.5
1962	6 359.9	98.6	1 208.8	1 101.6	294.7	543.6	524.5	10 131.7

TABLE 13. (continued)

e. Federal government

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Administration	Other	Total
1952	65.2	44.4	.	2.2	586.5	42.4	13.2	753.9
1953	70.9	61.3	.	8.3	642.7	36.0	27.6	846.8
1954	99.3	79.1	.	58.4	894.5	52.1	37.4	1 220.8
1955	114.8	101.3	5.8	124.4	1 086.4	46.2	56.0	1 534.9
1956	188.7	104.1	26.0	131.2	1 065.4	54.5	74.3	1 644.2
1957	393.4	142.8	32.1	146.7	984.1	90.3	76.8	1 846.2
1958	436.1	181.0	47.4	170.6	1 467.4	123.6	101.6	2 527.7
1959	502.0	215.6	61.1	215.1	1 521.5	144.3	105.6	2 765.2
1960	731.4	234.6	68.0	241.1	1 959.7	173.9	94.1	3 502.8
1961	725.7	345.7	94.2	244.0	2 608.4	188.1	127.5	4 333.6
1962	896.3	378.3	138.5	247.8	3 413.7	201.3	115.2	5 391.1

Appendixes

TABLE 14. Estimated total recurrent expenditure from internal sources, 1952-62 (in £ thousand)

a. Primary schools

Year	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
<i>Public sector</i>					
1952	237.3	46.7	123.6		407.6
1953	450.3	50.4	138.5		639.2
1954	454.5	56.0	271.5	0.9	782.9
1955	546.1	64.3	402.2	3.5	1 016.1
1956	675.7	76.6	547.4	5.7	1 305.4
1957	774.1	367.4	709.3	6.8	1 857.6
1958	901.3	599.1	851.1	12.5	2 264.0
1959	885.7	720.0	1 103.8	16.4	2 725.9
1960	1 065.9	967.4	1 481.0	26.5	3 540.8
1961	1 134.4	1 018.2	1 432.1	40.1	3 624.8
1962	1 455.1	1 033.1	1 399.1	52.7	3 940.0
<i>Private¹ sector</i>					
1952	307.7	1 694.7	1 355.0	130.9	3 478.3
1953	417.3	1 875.5	1 449.3	144.2	3 886.3
1954	470.8	2 187.5	2 339.2	190.4	5 187.9
1955	534.8	2 452.3	2 687.2	211.0	5 885.3
1956	758.4	3 786.0	2 835.9	292.8	7 673.1
1957	728.0	4 254.1	2 993.6	408.2	8 383.9
1958	811.4	4 228.1	3 400.7	441.2	8 881.4
1959	925.5	4 993.4	4 209.6	498.1	10 626.6
1960	1 084.1	5 606.4	5 406.4	726.0	12 822.9
1961	1 180.1	5 259.6	5 132.6	754.1	12 326.4
1962	1 216.6	5 211.4	4 960.8	918.8	12 307.6

NOTE

1. Assisted and non-assisted

TABLE 14. (continued)

b. Secondary schools

Year	Northern Region	Eastern Region	Western Region		Lagos	All of Nigeria
			Modern	Grammar		
<i>Public sector</i>						
1952	115.0	66.6	.	156.9	28.5	367.0
1953	171.8	84.4	.	207.8	32.1	496.1
1954	245.3	88.5	5.1	204.2	43.1	586.2
1955	307.6	71.0	16.6	281.9	64.9	742.0
1956	405.8	114.1	54.8	302.1	65.1	941.9
1957	446.3	154.9	114.1	318.1	67.3	1 100.7
1958	464.5	167.0	118.0	339.7	111.9	1 201.1
1959	494.0	194.5	155.5	398.6	129.9	1 372.5
1960	614.3	264.0	194.4	503.6	143.7	1 720.0
1961	579.4	315.2	231.2	512.5	150.8	1 819.2
1962	692.8	367.5	241.8	573.5	198.5	2 074.1
<i>Private¹ sector</i>						
1952	46.8	401.5	.	236.1	123.0	807.4
1953	58.9	418.5	.	273.6	136.1	887.1
1954	55.2	446.9	.	304.2	148.5	954.8
1955	87.9	485.4	62.3	440.9	156.1	1 232.6
1956	139.9	569.1	111.2	461.4	176.9	1 458.5
1957	136.2	567.5	181.1	554.5	260.5	1 699.8
1958	163.5	662.5	303.5	742.3	257.3	2 129.1
1959	211.3	756.8	466.5	811.2	289.1	2 534.9
1960	280.4	996.6	583.1	1 238.8	372.7	3 471.6
1961	350.1	1 061.3	820.2	1 409.9	500.3	4 141.8
1962	426.1	1 352.0	967.1	1 826.8	587.1	5 159.1

NOTE

1. Assisted and non-assisted

TABLE 14. (continued)

c. Teacher training

Year	Northern Region	Eastern Region	Western Region	Lagos	All of Nigeria
<i>Public sector</i>					
1952	135.6	46.9	82.6	.	265.1
1953	134.7	51.5	105.4	.	298.6
1954	156.1	59.4	133.7	.	349.2
1955	197.3	55.5	183.2	5.8	441.8
1956	244.1	74.4	288.6	13.3	620.4
1957	260.3	99.8	340.8	16.2	717.1
1958	294.7	107.0	362.2	25.5	789.4
1959	322.8	130.6	387.8	33.7	874.9
1960	405.6	139.4	445.0	38.2	1 028.2
1961	434.1	159.1	475.5	45.7	1 114.4
1962	543.4	188.1	540.7	86.3	1 358.5
<i>Private¹ sector</i>					
1952	115.0	175.6	191.2	.	481.8
1953	120.8	183.2	241.6	.	545.6
1954	125.6	249.6	270.5	.	645.7
1955	132.3	263.0	326.9	.	722.2
1956	213.6	419.0	334.6	12.7	979.9
1957	207.7	503.5	418.9	15.9	1 146.0
1958	250.8	512.8	412.6	21.9	1 198.1
1959	285.4	662.0	495.4	27.4	1 470.2
1960	365.4	742.6	549.4	29.8	1 687.2
1961	444.5	817.5	631.4	48.5	1 941.9
1962	608.4	724.4	672.0	52.2	2 067.0

NOTE

1. Assisted and non-assisted

APPENDIX D

TABLE 15. Government total expenditure for education 1952-62 (in £ thousand)

Year	Northern Region		Eastern Region		Western Region		Federal government		All of Nigeria	
	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital
1952	860.3	471.1	1 639.2	189.8	1 705.1	109.5	680.4	531.6	4 885.0	1 302.0
1953	1 096.6	627.6	1 905.9	181.1	2 035.2	241.1	754.7	1 303.6	5 792.4	2 353.4
1954	1 312.6	525.9	2 051.3	167.3	3 141.1	2 026.9	1 162.7	133.4	7 667.7	2 853.5
1955	1 674.9	760.2	2 142.7	72.6	4 229.1	1 571.7	1 549.9	106.4	9 596.6	2 510.9
1956	2 409.2	589.0	4 587.9	735.7	4 676.7	1 473.7	1 641.4	633.3	13 315.2	3 431.7
1957	2 544.2	849.3	5 532.4	229.6	5 140.8	1 717.8	1 804.3	929.2	15 021.7	3 725.9
1958	2 778.4	806.6	4 468.9	195.4	5 782.7	1 096.4	2 467.9	2 621.6	15 557.9	4 720.0
1959	3 149.0	964.4	5 786.3	202.8	7 061.2	1 147.4	2 661.3	789.2	18 757.8	3 103.8
1960	3 895.2	1 307.0	6 786.4	287.7	9 130.8	1 381.7	3 343.6	822.7	23 156.0	3 799.1
1961	4 151.5	2 328.3	6 965.0	309.7	8 971.9	741.7	4 120.2	492.1	24 208.6	3 871.8
1962	4 863.5	1 227.7	6 766.9	644.3	9 690.0	592.4	5 030.5	2 286.5	26 350.9	4 750.9

TABLE 16. Government direct expenditure and transfer payments for education 1952-62 (in £ thousand)

a. Northern Nigeria

Year	Direct expenditure		Grants-in-aid		Scholarships	Subventions and subsidies		Total	
	Recurrent	Capital	Recurrent	Capital		Recurrent	Capital	Recurrent	Capital
1952	404.8	266.6	420.5	204.5	29.3	5.7	.	860.3	471.1
1953	510.8	385.8	541.9	241.8	38.6	5.3	.	1 096.6	627.6
1954	595.9	215.8	625.1	310.1	77.0	14.6	.	1 312.6	525.9
1955	741.1	533.8	817.0	226.4	108.8	8.0	.	1 674.9	760.2
1956	883.5	422.1	1 378.9	166.9	113.3	33.5	.	2 409.2	589.0
1957	950.4	627.2	1 453.5	222.1	122.4	17.9	.	2 544.2	849.3
1958	1 084.0	580.3	1 586.4	226.3	135.9	32.1	.	2 838.4	806.6
1959	1 195.3	677.2	1 847.7	287.2	188.8	17.2	.	3 249.0	964.4
1960	1 492.5	956.3	2 181.8	350.7	204.0	16.9	.	3 895.2	1 307.0
1961	1 460.6	1 498.5	2 431.2	642.4	258.4	1.3	187.4	4 151.5	2 328.3
1962	1 766.1	351.0	2 777.3	859.1	306.8	13.3	17.6	4 163.5	1 227.7

b. Eastern Nigeria

1952	273.8	52.0	1 319.2	137.8	42.9	3.3	.	1 639.2	189.8
1953	319.0	52.7	1 495.8	128.4	87.1	4.0	.	1 905.9	181.1
1954	323.6	49.7	1 639.8	117.6	87.9	4.0	.	2 051.3	167.3
1955	285.7	20.7	1 686.7	51.9	165.0	4.3	.	2 142.7	72.6
1956	376.7	9.9	4 027.2	726.0	179.0	5.0	.	4 587.9	735.9
1957	445.2	55.0	4 867.6	174.6	197.7	21.9	.	5 532.4	229.6
1958	477.8	63.8	3 765.3	131.6	214.7	11.1	.	4 468.9	195.4
1959	522.4	130.3	5 008.2	72.5	240.6	15.1	.	5 786.3	202.8
1960	623.9	63.4	5 899.6	199.8	242.0	20.9	24.5	6 786.4	287.7
1961	756.9	134.1	5 911.0	175.6	267.5	29.6	.	6 965.0	309.7
1962	921.2	144.2	5 297.5	.1	293.4	254.8	500.0	6 766.9	644.3

TABLE 116. (continued)

c. Western Nigeria

Year	Direct expenditure		Grants-in-aid		Scholarships	Subventions and subsidies		Total	
	Recurrent	Capital	Recurrent	Capital		Recurrent	Capital	Recurrent	Capital
1952	410.3	109.5	1 277.0	-	11.4	6.4	-	1 705.1	109.5
1953	470.5	136.8	1 496.1	104.3	68.3	6.3	-	2 035.2	241.1
1954	465.6	145.7	2 540.1	1 881.2	125.7	9.7	-	3 111.1	2 026.9
1955	567.7	72.6	3 474.9	1 499.1	172.0	14.5	-	4 229.1	1 571.7
1956	680.6	108.9	3 725.9	1 364.8	253.3	16.9	-	4 676.7	1 473.7
1957	749.1	49.0	4 125.0	1 668.8	280.8	5.9	-	5 190.8	1 717.8
1958	784.7	165.3	4 751.4	931.1	219.4	27.2	-	5 782.7	1 096.4
1959	907.0	182.7	5 922.5	964.7	213.3	18.4	-	7 061.2	1 147.4
1960	1 116.0	316.6	7 780.2	1 053.5	211.0	23.6	11.6	9 130.8	1 381.7
1961	1 157.2	316.9	7 565.7	424.8	282.9	6.1	-	8 971.9	741.7
1962	1 254.5	296.6	7 840.9	295.8	236.0	358.6	-	9 690.0	592.4

d. Federal government

Year	Recurrent	Capital	Recurrent	Capital	Scholarships	Recurrent	Capital	Recurrent	Capital
1952	73.1	.2	3.4	22.6	188.4	415.5	508.8	680.4	531.6
1953	76.4	42.6	3.0	50.0	172.2	503.1	1 231.0	754.7	1 303.6
1954	154.5	70.4	72.0	53.0	205.4	730.8	-	1 162.7	133.4
1955	244.8	10.6	158.1	95.8	201.0	946.0	-	1 549.8	106.4
1956	269.8	9.2	228.8	249.1	191.0	951.8	57.0	1 641.4	633.3
1957	327.3	92.7	414.2	332.5	299.7	803.1	55.0	1 804.3	929.2
1958	438.9	112.6	459.0	509.0	412.4	1 157.6	2 000.0	2 467.9	2 621.6
1959	532.6	77.9	498.9	711.3	461.7	1 168.1	-	2 661.3	789.2
1960	607.6	149.5	679.4	613.2	714.9	1 341.7	60.0	2 447.6	822.7
1961	671.5	59.2	711.0	405.9	1 083.3	1 654.6	27.0	2 744.4	492.1
1962	746.5	825.0	752.2	357.7	1 232.6	2 299.2	1 103.8	3 500.0	2 286.5

TABLE 16. (continued)

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e. All governments

Year	Direct expenditure		Grants-in-aid			Subventions and subsidies		Total	
	Recurrent	Capital	Recurrent	Capital	Scholarships	Recurrent	Capital	Recurrent	Capital
1952	1 167.0	428.3	3 020.1	364.9	272.0	430.9	508.8	4 885.0	1 302.0
1953	1 377.7	617.9	3 530.8	504.5	366.2	518.7	1 231.0	5 792.4	2 353.4
1954	1 539.6	481.6	4 877.0	2 371.9	492.0	759.1	.	7 667.7	2 853.5
1955	1 839.2	637.7	6 136.7	1 873.2	647.8	972.8	.	9 596.5	2 510.9
1956	2 210.6	550.1	9 360.9	2 506.8	736.6	1 007.2	375.0	13 315.2	3 431.7
1957	2 472.0	823.9	10 860.3	2 398.0	840.6	848.8	504.0	15 021.7	3 725.9
1958	2 785.4	922.0	10 562.1	1 798.0	982.4	1 228.0	2 000.0	15 557.9	4 720.0
1959	3 157.3	1 068.1	13 277.3	2 035.7	1 104.4	1 218.8	.	18 757.8	3 103.8
1960	3 840.0	1 485.8	16 541.0	2 217.2	1 371.9	1 493.1	96.1	23 156.0	3 799.1
1961	4 046.2	2 008.7	16 618.9	1 648.7	1 852.1	1 691.6	214.4	24 358.8	3 671.8
1962	4 688.3	1 616.8	16 667.9	1 512.7	2 068.8	2 925.9	1 621.4	26 350.9	4 750.9

TABLE 17. Government expenditure for education, by type and level (in £ thousand)

a. Recurrent

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Other	Administration	Total
1952	2 450.3	579.6	567.8	308.2	680.8	13.2	285.1	4 885.0
1953	2 770.7	770.5	693.9	295.2	833.5	92.5	332.0	5 792.4
1954	3 933.1	817.9	837.7	319.6	1 186.4	122.9	450.1	7 667.7
1955	4 939.4	1 058.3	973.8	368.4	1 535.0	164.5	557.2	9 596.6
1956	7 611.8	1 386.0	1 413.8	467.2	1 603.8	131.8	650.8	13 315.2
1957	8 962.9	1 494.2	1 565.7	557.5	1 507.9	193.7	739.8	15 021.7
1958	8 588.5	1 582.6	1 702.7	654.3	2 001.9	194.2	833.6	15 557.9
1959	10 816.4	1 849.1	2 039.2	840.0	2 099.3	197.7	916.1	18 757.8
1960	13 908.5	2 313.9	2 414.0	1 055.2	2 554.5	192.7	1 117.4	23 156.0
1961	12 953.5	2 852.7	2 675.9	1 145.5	3 263.2	175.8	1 142.0	24 208.6
1962	12 386.7	3 347.7	3 165.1	1 255.0	4 698.9	192.8	1 304.7	26 350.9

b. Capital

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Other	Administration	Total
1952	138.6	201.6	262.8	176.7	508.8	.	13.5	1 302.0
1953	223.0	249.1	330.2	252.8	1 231.0	22.6	44.7	2 353.4
1954	1 765.5	539.1	417.8	122.3	.	4.7	4.1	2 853.5
1955	1 442.9	359.3	585.1	99.2	.	1.9	22.5	2 510.9
1956	1 793.5	403.5	576.0	257.5	375.0	.	26.2	3 431.7
1957	1 697.5	479.3	647.9	397.2	504.0	.	.	3 725.9
1958	1 274.6	434.7	498.6	512.1	2 000.0	.	.	4 720.0
1959	1 464.6	763.2	432.8	435.6	.	.	7.6	3 103.8
1960	1 436.6	989.0	628.4	642.8	11.6	60.0	30.7	3 799.1
1961	1 078.1	1 113.0	1 091.2	363.9	187.4	38.0	2	3 871.8
1962	1 106.5	868.2	694.2	443.7	1 621.4	.	16.9	4 750.9

TABLE 17. (continued)

c. Recurrent and capital

Year	Primary	Secondary	Teacher training	Technical and vocational	Higher	Other	Administration	Total
1952	2 588.9	781.2	830.6	484.9	1 189.6	13.2	298.6	6 187.0
1953	2 995.7	1 009.6	1 024.1	552.1	2 064.5	15.1	376.7	8 145.8
1954	5 698.6	1 357.0	1 255.5	441.9	1 186.4	127.6	454.2	10 521.2
1955	6 382.2	1 417.6	1 556.9	467.6	1 535.0	166.4	579.7	12 107.5
1956	9 351.3	1 789.5	1 989.8	724.7	1 978.8	181.8	677.0	16 746.9
1957	10 660.4	1 973.5	2 163.6	954.7	2 011.9	197.3	747.4	18 747.6
1958	9 863.1	2 017.3	2 201.3	1 166.5	4 001.9	194.2	864.3	20 277.9
1959	12 281.0	2 612.3	2 472.0	1 275.6	2 099.3	197.7	916.1	21 861.6
1960	14 944.9	3 302.9	3 042.4	1 698.0	2 554.5	252.7	1 117.4	26 955.1
1961	12 953.5	3 965.7	3 767.1	1 509.4	3 263.2	213.8	1 142.2	28 070.4
1962	13 493.2	4 215.9	3 859.3	1 698.7	5 802.7	192.8	1 321.6	31 101.8

TABLE 18. Government expenditure for primary education, 1952-62 (in £ thousand)

Year	Northern Region		Eastern Region		Western Region		Federal government		All of Nigeria	
	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital
1952	356.3	135.6	1 056.2	3.0	1 034.4		3.4		2 450.3	138.6
1953	402.0	152.3	1 223.1	2.1	1 142.6	68.6	3.0		2 770.7	223.0
1954	468.7	172.1	1 280.3	2.7	2 134.0	1 533.6	50.1	50.1	3 933.1	1 765.5
1955	596.8	174.4	1 304.5		2 523.3	1 172.7	114.8	95.8	4 939.4	1 442.9
1956	927.8	121.6	3 406.2	486.7	3 106.9	975.2	170.9	210.0	7 611.8	1 793.5
1957	1 016.4	160.2	4 233.7	17.5	3 397.9	1 231.8	314.9	288.0	8 962.9	1 697.5
1958	1 106.2	158.4	3 191.9	9.1	3 933.6	678.1	356.8	429.0	8 590.5	1 274.6
1959	1 300.6	203.9	4 161.0	16.0	4 983.2	692.8	371.6	551.9	10 816.4	1 464.6
1960	1 515.5	245.5	4 911.6	.6	6 538.6	742.7	542.6	447.8	13 508.3	1 436.6
1961	1 574.1	479.1	4 682.9	.8	6 215.2	291.3	481.3	306.9	12 953.5	1 078.1
1962	1 717.7	778.7	4 151.7	16.0	6 014.6	185.5	502.7	126.3	12 386.7	1 106.5

TABLE 19. Government expenditure for secondary education, 1952-62 (in £ thousand)

Year	Northern Region		Eastern Region		Western Region		Federal government		All of Nigeria	
	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital
1952	135.5	120.5	194.8	60.5	216.6	20.6	32.7		579.6	201.6
1953	199.3	132.4	220.8	60.2	313.3	22.7	37.1	33.8	770.5	249.1
1954	197.4	126.8	251.1	39.1	299.2	303.4	70.2	69.8	817.9	539.1
1955	272.9	225.2	267.1	5.3	402.0	118.2	116.3	10.6	1 058.3	359.3
1956	432.0	57.2	390.7	70.7	4 34.2	254.4	119.1	21.2	1 386.0	403.5
1957	432.3	39.4	424.9	72.8	477.6	262.9	159.4	104.2	1 494.2	479.3
1958	470.7	65.1	345.5	91.5	565.9	136.6	200.5	141.5	1 582.6	434.7
1959	511.4	333.1	464.4	110.8	631.2	179.1	242.1	140.2	1 849.1	763.2
1960	631.9	343.3	567.5	218.6	850.3	240.2	264.2	186.9	2 313.9	989.0
1961	757.3	578.3	798.6	281.9	920.1	151.6	376.7	101.2	2 852.7	1 113.0
1962	884.7	180.6	840.7	79.6	1 211.0	269.7	411.3	338.3	3 347.7	868.2

TABLE 20. Government expenditure for teacher training, 1952-62 (in £ thousand)

Year	Northern Region		Eastern Region		Western Region		Federal government		All of Nigeria	
	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital
1952	164.0	143.1	209.7	80.9	194.1	16.2	.	22.6	567.8	262.8
1953	192.9	169.6	228.4	79.5	272.6	51.1	.	30.0	693.9	330.2
1954	225.8	152.6	289.0	98.6	322.9	153.7	.	12.9	837.7	417.8
1955	278.3	309.2	278.9	48.8	410.8	227.1	5.8	.	973.8	565.1
1956	450.9	173.3	448.3	170.2	488.6	205.4	26.0	27.1	1 413.8	576.0
1957	460.9	277.1	466.8	138.1	605.9	199.7	32.1	33.0	1 565.7	647.9
1958	545.5	254.8	492.9	91.4	616.9	150.1	47.4	2.3	1 702.7	498.6
1959	601.5	209.8	679.3	59.9	697.3	128.5	61.1	34.6	2 039.2	432.8
1960	761.9	426.0	755.8	23.3	828.3	152.3	68.0	26.8	2 414.0	628.4
1961	866.3	995.4	832.1	14.7	883.3	47.6	94.2	33.5	2 675.9	1 091.2
1962	1 138.7	199.5	786.3	32.0	1 101.6	45.7	138.5	417.0	3 165.1	694.2

TABLE 21. Government expenditure for technical and vocational education, 1952-62 (in £ thousand)

Year	Northern Region		Eastern Region		Western Region		Federal government		All of Nigeria	
	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital	Recurrent	Capital
1952	98.6	71.9	64.1	43.4	143.3	61.4	2.2	.	308.2	176.7
1953	96.6	143.3	76.0	38.8	118.4	70.5	8.3	.2	299.3	252.8
1954	117.2	62.0	74.0	26.9	69.2	32.8	58.4	.6	319.6	122.3
1955	130.6	35.1	69.2	9.9	44.2	53.2	124.4	.	368.4	99.2
1956	190.2	229.9	68.2	.	77.6	27.6	131.2	.	467.2	257.5
1957	217.4	372.6	91.3	1.2	102.1	23.4	146.7	.	537.5	397.2
1958	274.5	328.3	93.1	3.4	116.2	131.6	170.6	48.8	654.4	512.1
1959	347.7	217.4	104.4	16.1	172.8	139.6	215.1	62.5	840.0	435.6
1960	425.1	286.3	158.6	20.7	230.4	234.6	241.1	101.2	1 055.2	642.8
1961	430.6	77.1	214.5	12.3	256.4	251.2	244.0	23.3	1 145.5	363.9
1962	440.4	51.3	272.1	16.7	294.7	91.5	247.8	284.2	1 255.0	443.7

Descriptive bibliography

The objective of this descriptive bibliography is to give the reader brief summaries of published and other documents which have been of benefit in providing information and in shaping opinion during the course of this study of the financing of education in Nigeria. The documents have to do with the development of Nigeria's formal education system; most deal occasionally, some specifically, with matters and problems of the financing of education.

OFFICIAL DOCUMENTS

- Accountant-generals' reports
- Estimates
- Accounts, estimates, and reports on local finance
- Annual reports of the department (ministries) of education
- Statistical reports
- Education ordinances and laws
- Statements on educational policies
- Educational development plans
- External aid reports
- Statistics and reports on Nigerians studying abroad
- Publications on the establishment and financing of Nigeria's universities

REPORTS, STUDIES, AND ARTICLES

- Reports
 - For Nigeria as a whole
 - For the regions
 - Special topics
 - In the context of Africa
- Studies
 - Education and manpower
- Articles
 - Resource use within education
 - Education and the economy

Descriptive bibliography

OFFICIAL DOCUMENTS

Accountant-generals' reports

Published several months after the end of each financial year (31 March), these reports give the actual expenditures of the various departments—in recent years known as ministries—of the governments in Nigeria. For the departments of education these expenditures are itemized under broad headings which separate payments of a recurrent from those of a capital nature.

Because the administration, including the public financing, of education was centralized during the three earlier years of the period under review, the accountant-general's reports for that time refer to the whole of Nigeria. For the financial years beginning with 1955/56 the reports are available for the federal government and for each of the governments of the Northern, Eastern, and Western Regions.

Lagos was designated a federal territory on 1 October 1954, an event which coincided with the regionalization of the administration and financing of the formal education system in Nigeria. Thus the schools in Lagos, formerly part of the school system of the western provinces, from that date came under the immediate administration of the federal government, their public financing being shown in the accountant-general's reports of the federal government.

Estimates

Budget estimates representing the planned expenditures of the various departments of government are completed some time before the commencement of the financial year (1 April) to which they refer, ready for submission to the legislative assembly for approval. For some years a separate, smaller volume (or volumes) of supplementary estimates may be required, and these in turn are submitted for approval.

The volumes of estimates for any one year normally also carry details of the approved estimates of the previous year, and of the actual expenditures of the year before that. The estimates provide considerably more detail of the projected (and approved) expenditures through sub-headings than is available of actual expenditures in the accountant-generals' reports.

Volumes of estimates are available for the years, and the governments, corresponding to the accountant-generals' reports mentioned above.

Accounts, estimates, and reports on local finance

For the years since regionalization of Nigeria's administration, the yearly accounts of the local (and native) authorities—of actual revenues and expenditures, and of estimates—are available (for most years, in printed form) from the ministries of local government for each of the Northern, Eastern, and Western Regions. In the case of the Northern Region, for example, these are represented in: *Accounts of native treasuries and estimates*; also, *Memorandum on native authority estimates*, which provides background explanations and commentary.

These accounts and estimates, prepared by the regional governments, contain under separate headings the details of expenditures on education, and indicate, for instance, the receipt of grants-in-aid from the regional governments.

For earlier years, when the administration of Nigeria was centralized, similar accounts, prepared by the department of native administration in Lagos, give the revenues and expenditures of the native authorities for the Northern, Eastern, and Western provinces, as they were then known.

The Lagos City Council issues yearly its *Financial statements*, and *Budget estimates*, which include itemized revenues and expenditures for education.

Parallel with these accounts and estimates are the *Annual reports* of the department of native administration (for earlier years) and of the ministries of local government of the regional governments (for later years). Included in these yearly reports is a record of the accomplishments of

the local (or native) authorities in the field of education, some indication of administrative problems met, and financial summaries.

Other official publications provide information and perspectives on local finance. For instance: the Northern Region ministry of local government's *Local government in Northern Nigeria*, Kaduna, 1962. This handbook is brought up to date and extended by the department of local government, Institute of Administration, Ahmadu Bello University, Zaria, in *Northern Nigeria local government: yearbook 1965* which has a section containing summarized information on local finance of education. A further source is the official publication by G. Oka Orewa. *Report on the problems of local government finance in Western Nigeria*. Ibadan, 1964.

Annual reports of the department (ministries) of education

For the years when the administration in Nigeria was centralized in Lagos, the annual reports of the department of education refer to the whole of Nigeria, and are usually divided into two principal parts. The first part, or preface, contains a record of the more recent developments in education in various parts of Nigeria, together with an explanation of existing policy. This record is brought up to date each year. Occasionally — as, for instance, the exceptional annual report of 1926, which reviews the expansion of education facilities in Nigeria from 1882 to 1925 — this historical perspective covers a longer period. The second part is customarily divided into several chapters dealing separately with legislation, administration and control, finance, followed by chapters devoted to primary, secondary, technical, teacher training, and other categories of education. An appendix summarizes statistical data on enrolments; and on finance, including direct payments and grants-in-aid to the school system, and items of revenue such as fees.

Much the same tradition for the annual report is being continued by the ministries of education of the Northern, Eastern, and Western Regions, except of course that the focus is on regional developments in education, regional policies, and regional statistical (including financial) summaries.

Because the federal ministry of education is responsible for all education within the Federal Territory of Lagos, a separate section of its annual report has to do with the yearly experience of the Lagos Education Office. (In respect of primary schooling, the ministry's responsibility is exercised through the Lagos City Council, which functions as a local education authority.)

In addition to the annual reports, several overview reports are available that bridge longer periods. One such is the federal ministry of education's *Triennial survey of the work of the federal department of education for the years 1955-57*. Another is the Western Region's *Triennial report on education 1955 to 1958*. For the Northern Region an official publication of the ministry of education reviews the development of education services from early times. D. H. Williams. *A short history of education in Northern Nigeria*. Kaduna, 1959.

Statistical reports

The federal ministry of education's *Statistics of education in Nigeria*, vol. III (earlier volumes being known as *Digest of education statistics*), is the authoritative, over-all presentation of statistics of Nigeria's formal education system. Its first part contains summarized, retrospective data for the years 1959 to 1963; its second part provides statistics of educational institutions, including universities, for the year 1963, for the regions, for the Federal Territory of Lagos, and for the Federation as a whole; its third part relates to examination candidates and results. (Two tables give, for the year 1963, the public expenditures on education of the federal and regional governments, by purpose and type of education.) Appendix A has a listing of secondary grammar schools according to their recognition for the award of the West African school certificate, of secondary commercial schools, technical and vocational institutions, and teacher-training colleges. Appendix B is a new feature giving data on primary schools in Lagos for 1963. Following this are graphs depicting the structure of the education system of Nigeria, and historical data on enrolments in primary and post-primary educational institutions.

Statistics of education in the territory of Lagos 1964, vol. I, 1966, apart from being an unusually comprehensive statistical picture of Lagos schools, gives data in two tables of actual (public)

expenditures, by purpose and by school ownership, for 1962-63; and by purpose only for the previous year, and estimated expenditures for the two subsequent years.

Regional governments have made a practice, especially in recent years, of making available special statistical reports on their school systems. For the Northern Region, the ministry of education has provided the following: *School statistics of Northern Nigeria* (1961, 1962, 1963); *Characteristics of teachers in the primary schools of Northern Nigeria*, 1963; *Classes, enrolments, and teachers in the schools of Northern Nigeria* (1964, 1965); *The 1963 directory of primary schools*; *School directory for Northern Nigeria* (1964, 1965); *School directory for the northern provinces of Nigeria*, 1966.

The Eastern Region's ministry of education has produced a *Directory of secondary schools, commercial schools, trade and technical schools*, 1963; and, though appearing also as supplements to recent annual reports, has published separately a series of *Education graphs and statistics*.

For the Western Region, the ministry of economic planning and community development, statistics division, has a much longer tradition than the other regions of presenting detailed statistics of school enrolments, teachers' numbers and qualifications, and other facts of the school system; by province and division. These are contained in the *Abstract of education statistics* (1961, 1962-63, 1964; and, for a span of years, 1953-58, and 1955-60).

Apart from these sources which have to do only with education statistics, several other, more general, official publications give summarized data on education. In particular, the Federal Office of Statistics' *Annual abstract of statistics*; the Northern Region, ministry of economic planning, *Statistical yearbook 1964*. First issue, Kaduna, 1965; the Eastern Region, ministry of economic planning, statistics division, *Statistical digest of Eastern Nigeria. Edition I*. Enugu, 1965; and the Western Region, ministry of economic planning and community development, statistics division, *Statistical bulletin*. Ibadan, half-yearly.

The West African examinations council gives examination statistics in its *Annual report for the year ended 31 March*. These annual reports have been issued regularly since 1955, and may be interpreted against the background of *Regulations and syllabuses for the West African school certificate examination for 1962 and 1963*, both by the Oxford University Press, 1964.

Other statistical sources have been of direct benefit to this study. Foremost among these is the professional work by P.N.C. Okigbo. *The Nigerian national accounts 1950-57*. Lagos, Federal ministry of economic development, 1962. Also the Federal Office of Statistics publication, *Population census 1952-53, census reports and tables for Eastern, Northern, and Western Regions*. Lagos, 1954. In addition to these, there are two duplicated documents of the Federal Office of Statistics: E.A. Adewole. 'The Nigerian national accounts: their development, sources and methods of compilation', 1964; and 'An economic analysis of government accounts 1957-58'. 1959.

Education ordinances and laws

An education ordinance or education law sets out the necessary legal provisions empowering the central, federal or regional administration — specifically, the head of the department of education or the relevant minister of education — to carry out approved policy. Within these provisions, the administration will usually have some powers of discretion. From time to time the ordinance or law may be subject to amendments; and new legislation may have the effect of consolidating previous ordinances or laws with their subsequent amendments.

(The term 'ordinance' is an expression more in use during the period when Nigeria was governed centrally through the legislative council; the term 'law' is used since the establishment of ministries and government by the federal house of representatives and the regional houses of assembly.)

These ordinances or laws cover variously such matters as general administration and control (advisory board of education, inspection of institutes, local education authorities); finance (including grants-in-aid regulations, maximum fees for secondary schools); regulations affecting teachers (such as teachers' council, teachers' retiring allowances and gratuities, revisions of salaries for voluntary agency teachers, grants for teacher training); universal primary education regulations; and so on.

Immediately prior to the start of the period under review in this study, the operative legislation,

with effect throughout Nigeria, was the *Education ordinance 1948, an ordinance to make better provision for education*, which gave effect to the *Memorandum on educational policy in Nigeria 1947*. This 1948 ordinance provides for the establishment of central and regional boards of education—composed of both official and non-official members—with advisory functions and with certain executive powers especially with regard to the opening and closing of schools; it also allows for the establishment of local education authorities and of local education committees. On the financial side, the ordinance sets out, in appendix A, the grants-in-aid regulations as adopted by the central government on the basis of the report by Sir Sydney Phillipson, assisted by W.E. Holt. *Grants-in-aid of education in Nigeria, a review with recommendations*. Lagos, Government printer, 1948. The 1948 ordinance was followed by *Education regulations 1949* which details further the rules for operating the new grants-in-aid system.

In order to bring this 1948 and 1949 legislation, together with their respective amendments, into accord with the provisions of the various constitutional instruments then in force (particularly that relating to the new revenue allocation procedure of 1951, which made necessary new financial arrangements between Lagos and the administrative centres in the regions) the *Education ordinance 1952, together with Rules for the award of retiring allowances and gratuities to non-government teachers*, was passed. Despite the fact that these changes in Nigeria's constitution were extended and partly superseded as a result of further constitutional conferences in London, in 1953, and in Lagos, in early 1954, this 1952 ordinance remained the basic all-Nigeria education law until the federal and regional governments, separately, created new legislation.

Thus, the federal government passed the *Education ordinance 1955* and followed this with the *Education (Lagos) ordinance 1957*.

In the Northern Region, the 1952 ordinance was replaced by the *Education law 1956*, which with subsequent alterations was reprinted in *Education law with amendments 1959*. As a result of a critique of the 1956 education law by H. Oldman in his report, *The administration of primary education*, Kaduna, 1962, the *New education law 1962* was created. This new law provides for a pattern of administration to help achieve the official targets for education expansion in the region, including the setting up by native authorities of local education authorities with responsibilities for the management of local schools, and for appraising and reporting on schooling needs in the areas of their jurisdiction. Several minor alterations were made by the *Education (amendment) law 1963*. This 1962 and 1963 legislation in turn was the subject of revision culminating in the present-day *Education law of Northern Nigeria 1964*, which in its published form (Kaduna, 1965) includes subsequent extensions as follows: the (education authorities) regulations 1964; the (grants-in-aid) regulations 1964; the education (general) regulations 1964. To assist the understanding of recent salary adjustments a Morgan award conversion table is also included.

The Eastern Region's *Education law 1956* came into operation on 1 January 1957, to substitute for the 1952 ordinance. This new law provides for a purely regional system of education based on ministerial organization and puts into practice the region's *Policy for education 1954*. More than this: the new law withdraws the official members from the region's board of education and leaves it with merely an advisory role. On the financial side, the 1956 education law gives authority for revisions of the salaries of voluntary agency teachers; and recasts the grants-in-aid machinery which on 1 January 1957, was to pass from a part-free, part-rate, part-grant arrangement to an all-grant system of financing at the primary level. This basic education law, and its revisions as at 31 July 1964, are now set out in *The education handbook 1964*. Enugu, 1965. This composite handbook presents the government's *Policy for education 1963*, the *Education law 1956*, together with the Grants-in-aid regulations 1962, the Revised teachers' salary tables 1964, Universal primary education regulations 1957, Teachers' (disciplinary provisions) regulations 1961, Maximum fees in secondary schools, circular 1964, and an explanation of the Voluntary agency teachers' superannuation scheme.

The Western Region's legislative break with the 1952 ordinance is represented in the *Education law 1954*. This was followed by several changes in regulations during 1955, 1957, and 1958, which are embraced in the *Education law and amendments up to 1959*. A recently printed handbook, *Education laws (cap. 34)*, Ibadan, 1962, brings together the legislation as at that time (including alterations in 1960 and 1961). It covers the role of local education authorities, the regulations for

free primary education, the functions of the advisory board of education, the terms-of-service committee, the teachers' council, and includes financial provisions (the grants-in-aid regulation, grants for teacher training, examination fees) as well as teachers' regulations.

Statements on educational policies

The full portrait of approved changes in official policies toward education of various types and levels in Nigeria is obtainable within the sessional papers acted upon by the legislative assemblies: for the earlier years of the period under review, this means the legislative council, and since full regionalization, the federal house of representatives and the regional houses of assembly. A summary approximation only is given in the published annual reports of the department, and later the ministries, of education. Special reports and official statements on educational policies need to be seen in conjunction with the means for their acceptance as policies.

From time to time statements of approved educational policies are specially published by governments. Several of these, because of their wide-ranging scope, are commented on below.

Setting the stage for immediately subsequent educational change is the *Memorandum on educational policy in Nigeria*. Lagos, 1947. This document outlines the educational needs of Nigeria as a whole and was accepted by government as the basis for development. The memorandum reviews progress from primary to higher education through to Arabic studies and museum policies. In respect of primary and secondary education the view is re-emphasized that the only way to get the funds for their further development and higher running costs would be through the continued merging of contributions locally with government funds. It expresses official urgency in having a thorough review of the grants-in-aid system of government financing of the schools throughout Nigeria, which in fact was undertaken by Sydney Phillipson the following year.

Federal government

The federal government's *Report on educational development in Lagos*, 1957, is a 'white paper' revealing policy for the expansion of education in the federal territory. Motivated by the view that free primary education was expected to become a reality in the Western and Eastern Regions, the report explores the possibilities of mass primary education in Lagos (in terms of public demand and of finance), and the physical obstacles to its accomplishment (difficulties of accommodation, especially the problem of acquiring sites on Lagos Island).

Educational development 1961-70, Lagos, 1961, is the official comment and statement of policy of the federal government as a consequence of the Report of the Commission on post-school certificate and higher education in Nigeria, *Investment in education*, 1960; and of the report on its phasing and costing, *Educational development 1961-70*, 1961. This white paper accepts most of the recommendations of the 1960 report and presents a summary of them. It mentions that the level of investment in education facilities for the period 1961-70 would work out to about £75 million, and that recurrent expenditures, to be met from governments' budgets in the Federation, would add to about the same amount.

Northern Region

The *White paper on educational development in Northern Nigeria*, Kaduna, 1961, relays the government's plans for the various stages of development of education in the region. These official plans allow for a phased programme of expansion at both the primary and secondary levels, and for related teacher training, taking specially into account those areas of the region where schooling facilities are most deficient. No detailed annual estimates of capital and recurrent costs are given, although substantial foreign aid would be encouraged to help capital expenditures.

Eastern Region

The Eastern Region's *Policy for education 1954* is the first official policy statement on education after full regionalization, and expresses the drive toward providing universal (not compulsory) primary education in the shortest possible time, at the least possible cost in public funds. At the primary level the aim of government is that 55 per cent of the recurrent costs be borne by grants-in-aid from the regional government, and that 45 per cent be found from local sources; the entire

share of local communities is to be paid from local rates, school fees are to be abolished. (This official approach follows the report by S. E. Johnson. *An inquiry into the proposal to introduce local rating in aid of primary education in the Eastern Region*. Enugu, 1951.) For secondary schooling, the policy is that every division in the region should have at least one secondary school, that local authorities and local communities be encouraged to take the initiative in achieving this goal, and that government's financial help for initial capital expenditures be given to those communities who first help themselves. Education for girls is to be expanded and parents persuaded to allow their daughters to attend schools. Further, the regional government's scholarships would be awarded not only for university and technical education but also for secondary education.

Policy for education 1963 represents a change of emphasis from assisting the development of primary and secondary grammar to fostering more technical and higher education. In the decade since the previous statement of government's policy, the expansion of primary and secondary education has been so great that now almost every village has one or more primary schools built entirely and enthusiastically by communal effort, with government contributing nothing towards the cost of the buildings: the same applies by and large to the establishment of secondary schools by voluntary agencies, the bulk of the money for construction needs having been collected by local people. At the primary level, this policy statement mentions the need for merging non-viable schools with viable ones. This over-abundance of primary schools had arisen from enthusiasm generated by the introduction of universal primary education in 1957 and also from denominational and village rivalries. Merging primary schools in this way would arrest wastage by more effectively using teaching resources. Finally, this policy document details the grants-in-aid provisions and gives the guidelines for the award of scholarships to post-primary, post-secondary, and post-graduate students.

Western Region

Proposals for an educational policy for the Western Region, Nigeria. Ibadan, July 1952, is a policy declaration announcing that free, universal, primary education would be introduced in the region. Of more than historic interest, this document was issued under the direction of the region's first minister of education, Chief S. Oduwale Awokoya. It gives a comprehensive survey of the many problems confronting the administration in its proposed carrying through of rapid expansion in every aspect of its educational services. Included among the problems analysed is that of apathy and inertia on the part of illiterate parents and of their refusal to permit their daughters to attend schools, the particular urgency of providing sufficient numbers of trained teachers, and the need for finding funds to meet the capital and recurrent expenditures involved. To overcome these difficulties, it would be necessary to launch a vigorous, mass-education programme; to expand voluntary agency, and to create local authority, teacher-training colleges; and to seek for additional sources of revenue. This sessional paper then outlines the scheme for free, compulsory, primary education (the compulsory aspect was later dropped) to consist of a six-year course starting in January 1955. In addition to this accelerated expansion of primary schooling, more secondary grammar schools were to be established; science to be introduced into all secondary schools and their libraries enlarged. To develop technical education, eight technical colleges were envisaged. With respect to administration, the duties of the regional advisory board of education are explained; and government secondary schools and teacher-training colleges would be required to have boards of governors. This momentous programme was promptly begun, and although certain modifications were later made, the broad outlines of the policy statement were put into effect.

Educational development plans

In order to make the best use of grants under the Colonial Development and Welfare Acts, a systematic plan, showing stages for expansion of education, was produced as a sessional paper in 1947, and was adopted by the legislative council in 1948, as part of the *Ten year plan of development and welfare for Nigeria*. Lagos, 1948. This education plan emphasizes expanding primary schooling in villages with a strong rural bias to the curriculum; class-room instruction, school gardens and farms, and handicraft classes are seen as a means of improving rural life and of help-

ing to introduce better farming methods and new crops. Special post-primary farm schools were to be set up; technical education to be expanded in the larger towns to produce tradesmen; four rural education centres to be established; secondary schooling for both boys and girls in government and voluntary agency schools to be extended and improved; more teacher-training colleges to be established, including one for secondary school teachers. The plan expects continued co-operation between the central government and voluntary agencies, and therefore the projected government expenditures for elementary and secondary schooling and for teacher training are mainly through grants-in-aid. Capital grants and recurrent assistance are complementary to local organization and financing. The cost of this plan to the government is estimated at slightly less than £6 million of which somewhat over half is for the cost of buildings. Several modifications to the original plan for education are contained in the *Revised plan of development and welfare for Nigeria 1951-56*. Lagos, 1951.

The first real analysis of educational expansion within the context of economic development is given in the report of a mission organized by the International Bank for Reconstruction and Development (IBRD) at the request of the government of Nigeria and of the United Kingdom: *The economic development of Nigeria*, Lagos, Government Printer, 1954. The report provides a critique of the needs for primary, secondary, technical, and higher education, and makes assessments of financing for some years ahead. While recognizing that recent constitutional revision has placed on regional and local governments the responsibility for organizing, financing, and supervising primary and secondary education the report nevertheless recommends that the federal government carry out functions of inspection backed by a special and modest programme of financial assistance to the regions. The report's financial projections for primary schooling are based on an estimate that enrolments could increase at a rate of 15 per cent per year in the West, 10 per cent in the North, 8 per cent in the Southern Cameroons, and 6 per cent in the East. These rates of expansion are considered to be as high as the availability of trained teachers will allow. Over-all education expenditures by all levels of government: from £6.3 million in 1953/54 to over £14 million in 1959/60, with about 56 per cent of recurrent expenditure in the last year of this period going for primary schools. Total capital expenditure would be likely also to approach £14 million over the five-year period: 34 per cent for primary, 23 per cent for secondary, 15 per cent for teacher training, 17 per cent for technical, and 10 per cent for higher education. In principle, the report emphasizes, higher education should be financed by federal funds, secondary education by regional funds, and primary education by local funds. The regions should, however, contribute substantially to primary schools, and to the regionalized branches of the Nigerian College of Arts, Science and Technology. In urging that the cost of primary schooling be borne to the greatest possible extent at the local level, the report argues that the greater the local responsibility for the cost of education, the more genuine will be the community interest in its schools.

Economic development programmes in the middle 1950s provide for increased diversity and a quickened spread of education facilities. These were affected to some extent by the general lines suggested by the IBRD mission report but also by other special reports and studies. The results are shown in the provision made for education in the federal government's *Economic programme of the Federation of Nigeria 1955/60*. Lagos, 1956; in the Northern Region's *Development finance programme 1955/60*. Kaduna, 1955; in the Eastern Region's *Development plan 1955/60*. Enugu, 1955. The Western Region's government gets away from the view of a development programme being a category of departmental projects, as is shown in its *Development of Western Region of Nigeria 1955-60*. Ibadan, 1955, and more particularly in the reasoned analysis of development in the subsequent plan, *Development plan 1960-65*. Ibadan, 1959.

Nigeria's first full-scale effort in economic planning is, however, contained in the *National development plan 1962-68*, which also provides an analysis for the Federation as a whole and which includes the individual plans of the federal government and of the regional governments: federal government *Development programme 1962-68*; Northern Nigeria *Development plan 1962-68*; Eastern Nigeria *Development plan 1962-68*; Western Nigeria *Development plan 1962-68*. (Mid-western Nigeria's *Development plan 1964-68* became available from Benin in 1965.) Formal education, along with industry and agriculture, is given top priority in the national development

plan. Apart from pressing for further primary and secondary school facilities, special provision is made for more technical and managerial training, and for the development of the universities. Of the total planned capital expenditures for the Federation as a whole during the six-year period of the plan, some £70 million (that is, about 10 per cent of the total) is expected to be spent on projects to do with formal education. The federal government itself is due to contribute £14 million, mainly for higher education.

External aid reports

For the earlier years of the period covered in this study, the principal provider of capital assistance to Nigeria's formal education was the United Kingdom through the Colonial Development and Welfare Fund, the details of which have been traced through Nigeria's official accounts. In recent years, however, Nigeria's formal education has benefited from external assistance in the form of grants and loans from a number of governments, international organizations, foundations and others. This help has come mainly in the form of capital aid for buildings and equipment—for universities, technical colleges, and schools—but includes also the provision of teachers, and scholarships for study abroad.

Data for this more recent period, for use in this study, was obtained, in the first instance, by personal interviews conducted in Lagos with the representatives of these foreign institutions, and this was later supplemented by published material and information from other documents.

Central among these other sources is the series of facts collected by the bureau of foreign aid for education, federal ministry of education, Lagos; and the study by L. Cerych. *The integration of external assistance with educational planning in Nigeria*. Paris, Unesco/IIEP, 1967 (African research monographs—14). Further documentation was obtained in the Overseas Development Institute's *British aid—3. Educational assistance*. London, ODI, 1963; and *United States technical and capital assistance in support of economic development in Nigeria. Report as of January 1965*. Lagos, US-AID, 1965. This publication contains summary information on AID education projects, the largest sector of the United States assistance programme in Nigeria.

Statistics and reports on Nigerians studying abroad

A number of publications provide approximate information on the numbers of Nigerian students studying abroad, with varying detail on proportions of men and women, on the institutions they are attending, and on the subjects being studied. Because of the methods of compilation none of these sources claim full coverage, but taken together they do give a substantial indication of numbers and characteristics.

Thus, the British Council's annual publication, *Overseas students in Britain*, provides a breakdown of students in institutions of higher learning, by broad categories of subjects being studied. The Association of Commonwealth Universities' *Students from other countries in United Kingdom universities, 1963-64* contains much the same data. For the United States, the Institute of International Education, New York, has published annually since 1960 *Open doors. A report on international exchange*, which gives the numbers of Nigerian students in higher education in the United States, by subject speciality, such as humanities, engineering, agriculture.

The Office of the agent-general for Eastern Nigeria gives a listing in its *Directory of Eastern Nigerian students in the United Kingdom, the Republic of Ireland, and the continent of Europe as at the beginning of 1964*. Similarly, the Office of the agent-general for Western Nigeria provides information in the *Directory of Western Nigerian students in the United Kingdom and the continent of Europe at 1963-64 session*. Though the listing is considerable, it refers only to those students who have registered with the respective offices of the agents-general.

A further reference is the federal ministry of education's *National register of students, 1965. Potential graduates*. Lagos, 1965.

Publications on the establishment and financing of Nigeria's universities

Nigeria's first university, the University College, Ibadan, now with independent status and known as the University of Ibadan, took shape at the time it did (1948) as a result of views expressed in

the *Report of the Commission on higher education in West Africa*. London, HMSO Cmd. 6555: 1945. As a further consequence of this report the Yaba College was closed, and the *Ten year plan of development and welfare for Nigeria 1946-56* included financial provision for the creation of the Nigerian College of Arts, Science and Technology (which was established on a regional basis, with branches in the Northern Region at Zaria, in the Eastern Region at Enugu, and in the Western Region at Ibadan).

This 1945 report recommended that all capital expenditure for the creation of the new university, as well as for the three new territorial colleges, be met from Colonial Development and Welfare funds; and suggested further that annual recurrent expenditure be met in part from the same source. (On later financing, a document of interest is the *Proposals for the future financing of the Nigerian College of Arts, Science and Technology*. Lagos, 1953.)

Crucial impetus to the creation of more universities in Nigeria—and the displacement of the existing branches of the Nigerian College of Arts, Science and Technology—came in the recommendations of the Report of the Commission on post-school certificate and higher education in Nigeria, *Investment in education*, Lagos, 1960.

Nigeria's five present-day universities have been established under various legislation as follows: *The University of Ibadan act*. Lagos, 1962; *The Ahmadu Bello University law*. Kaduna, 1962; *The University of Nigeria law*. Enugu, 1962; *The University of Ife (provisional council) law*. Ibadan, 1961; and *The University of Lagos act*. Lagos, 1962.

The National Universities Commission, founded as a result of a recommendation in the 1960 report, commenced its duties with a survey of university development in Nigeria and with an assessment of future needs of financing. The result is the publication of *University development in Nigeria. Report of the National Universities Commission*. Lagos, 1963, which includes comments and recommendations on university financing for the remaining period of the National Development Plan, 1963-68. Official federal government reaction to this report (arrived at after discussions with the regional governments) is available in a white paper, *Decisions of the Government of the Federal Republic of Nigeria on the Report of the National Universities Commission*. Lagos, 1964.

The chief statistical sources used in the present study—with respect to the financing of the five universities—comprise the following: for the University of Ibadan, the *Audited accounts for the financial years ended June 30*, for 1953 through 1964; for Ahmadu Bello University, data on finances obtained from reports of the National Universities Commission; for the University of Nigeria, Nsukka, the *Annual reports* for the years 1960 through 1964; for the University of Ife, Ibadan, financial data provided directly by the university authorities; for the University of Lagos, the *Financial statements* for the years 1962/63 and 1963/64.

REPORTS, STUDIES, AND ARTICLES

Reports

For Nigeria as a whole

An exhaustive treatise on the subject of central government grants-in-aid of education is the report by Sydney Phillipson, assisted by W. E. Holt, entitled *Grants-in-aid of education in Nigeria, a review with recommendations*. Lagos, Government Printer, 1948. With only minor changes the report's recommendations were accepted by the legislative council, its principles included in appendix A of the 1948 education ordinance, and its administrative effects further spelled out in the 1949 education regulations. The report gives historical background as the basis for projections into the future; it takes a logical view of national economic resource use; it emphasizes the importance of relating policy objectives to the administrative procedures for carrying them through and to the means for financing them. Because of these factors and its humanistic approach to the problem of the varying abilities of Nigerian families to pay for their children's schooling, this report was exceptionally meaningful and influential during the decade of educational expansion

for which it was designed. Thus, although the operative part of the report consists of a series of recommendations—the basis for a revised, long-term, grants-in-aid policy—it is perhaps best thought of as a blueprint for the extension and improvement of Nigeria's entire system of formal education.

The years immediately prior to the Phillipson investigation were punctuated by periodic interim and *ad hoc* adjustments in the level and manner of grants to voluntary agencies. This climaxed in 1947 with the fixing of salary scales for non-government teachers (representing agreement among the voluntary agencies, the Nigerian union of teachers, and the central government) and the adoption of a provisional arrangement for giving grants to enable the voluntary agencies (and, a new feature, the native authorities) to meet the resulting higher costs of running their schools.

Among the defects of the grants-in-aid procedure then existing (as explained in earlier annual reports of the department of education) were the following. A large proportion of the grants-in-aid paid to voluntary agencies was to enable their teachers to be paid at certain salary scales, but this was being done without close reference to the efficiency, educational necessity, or social usefulness, of the schools in which these teachers were employed. No official control was being exercised over the newly grant-aided schools. The distinction between assisted and non-assisted schools, so important in the 1927 education regulations, had been almost obliterated, because both groups were receiving grants-in-aid but under two different systems, some on the basis of efficiency, some by indirect (interim) grants in respect of teachers only; the dual nature of this grants-in-aid procedure was meaningless and confusing. The list of approved voluntary agencies had been compiled from time to time without any clear principle of acceptance. Due to historical causes, notably the 1926 creation of two separate education ordinances for the northern provinces and southern provinces respectively, the administration of grants-in-aid between the two parts of Nigeria differed more than variations in local and regional conditions justified. The native authorities had never been officially considered as eligible for grants-in-aid to help the running of their schools, although the 1947 interim settlement of teachers' salaries broke with this tradition. Excessive numbers of uncertificated and probationary teachers were employed in the southern provinces compared with the certificated ones. As a result of the various interim arrangements concerning grants, the amount of additional work thrown on the voluntary agencies was needlessly onerous in both volume and complexity. Also, neither the central government nor the voluntary agencies had a clear enough picture of their commitments over a period long enough to warrant confidence in planning ahead.

Taking these problems into account, the task of the Phillipson investigation (stated here in the broadest terms) was to rationalize the procedure of co-operation between local communities and the central government, in bringing about further expansion of approved schooling facilities, and in meeting the recurrent expenditures in as equitable a manner as possible. Because the problem of grants-in-aid of secondary schools and of teacher-training institutions was considered as presenting less difficulties, the main preoccupation of the more technical analysis supporting the recommendations is slanted towards primary education. Although the view is expressed that financial assistance towards non-recurrent costs of educational institutions cannot be as precisely governed by regulations, the analysis does lead to the outlining of principles for making such capital grants. Guiding the reasoning in the report is a time horizon of about ten years.

The salient recommendations of the report are as follows. Schools must be officially approved as educationally necessary, and as efficiently run, before they can qualify for grants-in-aid. The division of recurrent costs between public revenue and the communities served by the schools should be made on the basis of a formula, the essence of which is: that the grant-in-aid be the recognized expenses less the assumed local contribution. This assumed local contribution would give expression to the economic circumstances of different areas, or zones; thus, the financial burden on the local community would be less in poor areas than in more economically advanced areas. Native authority schools should qualify in the same way as voluntary agency schools. Central and regional boards of education (specially constituted with representative, non-official majorities) should be established; and these boards, which should have specified advisory and executive functions, would be responsible for setting up local education authorities and local education committees. After a scrutiny of other aspects of the system of formal education,

further recommendations are made on such topics as: the 'special purposes' grants, education of women and girls, expatriate staff, special-type schools, the creation of a national teaching profession, the teachers' superannuation scheme.

The report's historical review of grants-in-aid of education in Nigeria, which necessarily encompasses in outline the expansion of formal education, is authoritative. The southern and northern provinces are dealt with separately up to 1939 (including thus their respective set-backs to the spread of education in the 1930s) with two staging points: 1913, the year before the amalgamation of Northern and Southern Nigeria; and 1929, the year which illustrates the results of the 1926 education (colony and southern provinces) ordinance, and the regulations deriving from it. The explanation of changes in the grants-in-aid system since 1939 relates to Nigeria taken as a whole. The appendixes to the report deal variously with facts about the growth of primary, secondary, and teacher-training facilities, with expenditures by the department of education from 1928 to 1947, and with the expected output from teacher-training centres; estimates are given of the grants-in-aid required for helping to meet expected recurrent expenses of primary, secondary, and teacher-training institutions, and data is provided on rates of assumed local contribution.

The Report of the Commission on post-school certificate and higher education in Nigeria, *Investment in education*. Lagos, 1960, is the result of an evaluation of the needs for formal education made by a nine-man panel composed of representative Nigerians together with American and British colleagues, the chairman being Sir Eric Ashby. Although chiefly concerned with technical, commercial, and university education, the commission surveys quantitative and qualitative progress over a wider field, including primary and secondary schooling. The focus of interest is an educational planning stretch of twenty years. The required numbers of senior educated persons are determined as a result of computations made by F.H. Harbison of the high-level skills needed for the economy up to the year 1970. With the goals thus set out, the specific recommendations for extending and improving the various types and levels of formal education, are far-reaching. They have had a pronounced effect on subsequent policy decisions of the federal and the regional governments. In particular, the recommendations support the drive for expansion of facilities for advanced teacher training, for more sixth forms and improved science teaching in secondary schools, for more technical education. Side effects include, for instance, the strengthening of the Northern Region's policy not only for expanding the numbers in secondary schools but also for widening the opportunities for primary schooling, especially in neglected areas. Suggestions made by the commission led to the creation of the National Manpower Board and of the National Universities Commission. Local reaction to further recommendations in the report led to the setting up of three more universities (the University College, Ibadan, and the University of Nigeria, Nsukka, were already functioning), and of the absorption into the university system of the existing branches of the Nigerian College of Arts, Science and Technology.

With respect to the financing of Nigeria's education, in general and in relation to the suggested expansions, the report is open-ended. It recognizes that the cost of implementing the recommendations would be considerable, but expresses hope for large amounts of foreign aid. Two illustrative estimates are given in the report: the placing of sufficient emphasis on the need for graduate teachers, Nigerian and other, would mean over-all expenditures of between £15 million and £20 million by 1970; also, the capital costs of suggested university development would be of the order of £20 million.

Estimates of required expenditures are provided, however, in the report by J. N. Archer. *Educational development in Nigeria, 1961-70* (Report on the phasing and cost of educational development on the basis of the Ashby Report of the Commission on post-school certificate and higher education in Nigeria). Lagos, 1961. In translating the commission's proposals into financial needs, this analysis covers the various kinds of formal education, dealing separately with expected capital and recurrent expenditures. These projections of expenditures are a central element in the educational aspects of Nigeria's six-year national development plan.

Other reports having to do, wholly or in part, with education and covering all of Nigeria, are those written by Unesco's Educational Investment Programming Mission in 1963, by IBRD, and by US-AID. All have been done since 1960 with the prospect of external assistance in mind. None is available in published form for wide circulation.

For the regions

For the Northern Region, the report by H. Oldman, *The administration of primary education*. Kaduna, 1962, gives the results of an inquiry into problems of administration and of financing. It recommends the setting up of local education authorities (within native authorities) and that there be a special course for training their staff. With the purpose of considering all local questions relating to primary education, these local education authorities would be responsible for establishing education committees, which would include as members the representatives of school proprietors who transfer their schools to the local education authorities. By this administrative procedure, more effective control would be exercised over the system of primary education by the regional government in co-operation with local interests. On the side of financing of primary education, the report provides a summary view of the grants-in-aid system and emphasizes the importance of detailed costings, for which purpose it provides illustrations.

The Eastern Region's *Report on the review of the educational system in Eastern Nigeria*. Enugu, 1962, is the result of an investigation conducted in 1959 by a commission with K. O. Dike as chairman. Wide-ranging in scope, the report includes a review of the administration, including the local management, of primary, secondary, teacher-training, commercial, and technical education. Also covered are such topics as vocational guidance and the adequacy of school examinations and certificates. Recommendations give prominence to the need for more secondary education with better quality science teaching, for more technical and vocational training, and for improved teacher-training facilities. On the financing of education, the existing practices of distributing grants-in-aid are examined, also the impact of universal primary education on the region's annual budgets.

The outcome of a further exploration is given in the *Report of the Conference on the review of the educational system in Eastern Nigeria*. Enugu, 1964. The report is the result of an analysis made by a wide selection of the region's educationists during an eight-day conference under the leadership of Alvan Ikoku.

The structure and functioning of the Western Region's schools and trade centres are examined in the *Report of the commission appointed to review the educational system of Western Nigeria*. Ibadan, 1961. Chairman: Canon S. A. Ayo. The commission's recommendations are given in considerable detail and include the suggestion that all secondary modern schools be transformed by merger and/or expansion into junior secondary schools, and that their fee-paying be retained. In many respects the commission's work can be interpreted as the exploration of the effects of applying the recommendations of the 1960 Ashby commission to the schooling system of the region.

A thorough analysis, with recommendations, on the level of school fees is contained in the *Report of Commission of inquiry into the rise in fees charged by public secondary grammar schools and teacher-training colleges in Western Nigeria*. Ibadan, 1963. The report includes a short sketch of the relevant aspects of grants-in-aid financing, and outlines the case for regulating, by limits, the fees chargeable for particular services provided at the schools and colleges. The commission was led by J. Ade Ajayi.

Special topics

Technical and vocational education has from time to time been the subject of special reports. One of these, M. Goldway's *Report on investigation of vocational education in Eastern Nigeria*. Enugu, 1962, describes vocational education as it applies to technical change, and as it is practised in the schools, the technical institute, the trade centre, and within industry. Recommendations embrace most elements of vocational education such as government trade tests, syllabuses, methods of selection for courses, and training aids.

Another report is that by A. Skapski. *Development of technical education in relation to the educational system in Western Nigeria, 1962-1970*. Ibadan, 1962. The author examines the need for pre-vocational technical education in the region's secondary modern and secondary grammar schools, also the role of government in encouraging prominent industrial employers to develop vocational training on a more systematic basis. Dr. Skapski's influential analysis (covering the training of artisans and craftsmen, of technicians, and of graduate engineers) has since been elaborated into a closely reasoned programme with meaning throughout Nigeria.

Descriptive bibliography

Robert Matthew, Johnson, Marshall, and partners, in their *Report on building costs*, London, 1963, provide illustrative data on the capital costs of school buildings. Their investigation was undertaken at the request of the government of Northern Nigeria.

T. T. Solaru's *Teacher training in Nigeria*, edited and with a final chapter by I. Espie, Ibadan, University Press, 1964, is both a record and a critique of the training of Nigerian teachers since the earliest times. Government policies adopted from time to time, including the level and method of providing grants-in-aid and block grants for teacher training, are explained and their effects assessed.

An analysis of the roles of formal education, and of specialized training, required for a suitable pace and direction in agricultural improvement in Nigeria, is provided by H. A. Oluwasanmi in *Agriculture and Nigerian economic development*. Ibadan, Oxford University Press, 1966.

In the context of Africa

The Nuffield Foundation's Cambridge Conference on African education delved into a wide array of educational problems, the findings of which are sorted out in *African education: a study of educational policy and practice in British tropical Africa*. London, 1953. The report covers all kinds of formal education excepting universities. Problems of the financing of education centrally and locally are dealt with and include, in general terms, an analysis of the principles behind the application of government grants for educational development, and of local contributions by way of fees, rates, and taxes.

Of particular interest also is the perspective given in the publication of the results of meetings held for African educationists, arranged jointly by ECA and Unesco: *Conference of African states on the development of education in Africa*. Addis Ababa, 1961. *Final report*, 1961. This important conference outlines the needs and the expected costs of creating modern educational systems suitable to the conditions of developing African nations. Targets are established of the proportions of school-age children at different levels of education for a period twenty years ahead. The cost figures, meant to be illustrative, are arrived at on the basis of anticipated economic growth and assume considerable external assistance for education.

Studies

Education and manpower

The National Manpower Board, formed in 1962, has a strategic role in helping to determine the general dimensions of the nation's requirements of persons possessing high professional and technical qualifications. This is revealed in its published manpower studies: no. 1. *Manpower situation in Nigeria (preliminary report) 1963*. (See also the contribution by T. M. Yesufu in *The Nigerian journal of economic and social studies*, vol. 4, no. 3. Ibadan, 1962.); no. 2. *Nigeria's high-level manpower 1963-70*, which gives projections of the needs for qualified Nigerians up to the end of the national economic plan period, and for some occupational groups up to 1970; no. 3. *A study of Nigeria's professional manpower in selected occupations 1964* is an analysis of the qualifications of Nigerians, as recorded in the National Manpower Board's register, and covers a variety of categories from architecture, engineering, medicine, to accounting and mathematics. The general approach taken by the board's secretariat is that of assessing the factors explaining the economy's demands for, and supplies of, qualified people during the present national economic plan period, and beyond. These assessments are helped by nation-wide surveys. (A forerunner to some aspects of the earlier work of the secretariat is the signal contribution made by F. H. Harbison in the 1960 report, *Investment in education*.)

Pioneering studies in the field of manpower and of staff development in the public services of Nigeria are those of J. Donald Kingsley. *Staff development in the public service of Eastern Nigeria*. Enugu, 1961; also J. Donald Kingsley and Sir Arthur Nevil Rucker. *Staffing and development in the public service of Northern Nigeria*. Kaduna, 1962. Both studies resulted from specific requests by the governments in Nigeria to the Ford Foundation. They provide an analysis not only with respect to the regional governments but to local and native authorities as well. The studies have immediate bearing on the needs for qualified persons by the public services within

the range of management and intermediate supervisory, and of clerical and secretarial, levels; and as between professional and technical personnel. In addition to giving profiles of staff progression and of education and training requirements, these studies include recommendations.

Education and World Affairs in its study no. 2 draws on data available in Nigeria to construct a picture of the main elements relating to the needs of highly qualified people in the future and match this with an assessment of the likelihood that the nation's educational institutions will be able to meet these demands: *Nigeria. Study of manpower needs, educational capabilities, and overseas study*. New York, 1965.

Although devoted chiefly to the requirements of specialized training institutions, a study by the Food and Agriculture Organization of the United Nations (FAO), prepared by R. Rowat, has direct relevance for Nigeria's system of formal education. *Report to the federal and regional governments of Nigeria on the development of education and training in the field of agriculture and related subjects*. Rome, FAO, 1965.

Articles

A number of articles have direct or indirect bearing on Nigeria's system of formal education, and of its correlate, financing. Some of these relate to a view of the problems within the system of education; others are concerned with the manner in which education meshes with over-all economic and social advancement.

Resource use within education

A theoretical paper by P. N. C. Okigbo, 'Criteria for public expenditure on education', was presented to the International Economic Association's conference in 1963. In it the author explores the validity of the private and social benefit-cost method of analysis, and of the manpower-requirements approach, in achieving priorities in public expenditure on formal education, as applied to Nigerian conditions.

(Combining both a theoretical and statistical analysis, an unpublished study by S. Bowles establishes a model to assist the making of major economic decisions related to formal education using data of Northern Nigeria, and endeavours to achieve a consistency in the treatment of benefit-cost of major policy alternatives.)

A critique of the progress made in expanding education in Nigeria during the period 1960-64 is provided in a paper given at the Unesco National Commission for Nigeria conference on educational planning by A. Musone. 'A statistical appraisal of the development plan for education', *Report and recommendations*. Lagos, April 1965.

Several articles trace aspects of the expansionary phases of Nigeria's education. One of these is by J. Ade Ajayi. 'The development of secondary grammar school education in Nigeria', *Journal of the historical society of Nigeria*, vol. II, no. 4, December 1963.

Another is by J. O'Connell. 'The state and the organization of primary education in Nigeria, 1945-60', chapter in H. N. Weiler. *Education and politics in Nigeria*. Freiburg, 1964. This article makes reference to recent changes in financing procedures, with consequent strains on regional budgets.

Alan J. Pifer gives a portrait of the chief elements in the expansion of Nigeria's education since early times, reviews social and economic problems being met in the effort of creating a true national system of education, and, while explaining the dimensions of the financing needed for present educational programmes, suggests an urgent role for external help. 'Education: bulwark of Nigeria's independence', *Africa in transition*. Tucson, University of Arizona Press, 1961. (Kennecott lectures, no. 6, 1960-61.)

Education and the economy

Formal education within a pattern of national economic resource use is the theme, more or less closely defined, of several papers presented to the National Manpower Board's Seminar on manpower problems in economic development with special reference to Nigeria, held in Lagos in March 1964. Central among these is the paper by Chief S. Oduwole Awokoya. 'Educational philosophy and structure for economic development: the Nigerian point of view'. The author

presses his views of the need for re-thinking the curriculum in the nation's schools consistent with the unfolding of modern opportunities, particularly in science and technology. He asks for a closer understanding of the relatedness of the parts of Nigeria's system of education, and for a closer alliance between planning for education and over-all economic planning. In order to meet the cost of the existing system of education, and to make provision for costly new approaches, the paper emphasizes the dominant requirement of an analysis of educational finance as an instrument for raising the productivity of educational institutions, and for utilizing external aid for education to greater benefit.

Ayo Ogunshye's contribution to this seminar is his paper, 'Manpower problems in economic development: integrating manpower planning with general planning'. Drawing on theoretical analysis and on practical experience of policies in Nigeria, the author explores the economic and social forces operating behind the demand for, and the supply of, educated persons. This leads to a critique of the employment and education aspects implicit in the 1962-68 national development plan. While pointing to the ever-present likelihood of some conflict between the objectives of more wage-employment and of higher output and growth, the paper examines the possibilities of greater labour intensity in the plan's projects, and indicates the meaning of these for changes in Nigeria's programme of education, for schools and universities.

S. A. Aluko provides an exploratory analysis of 'Public finance and education in Nigeria' in his paper to the International congress of public finance, held in September 1965. The paper first depicts the changing responsibilities for education among the public sector, voluntary agencies, and private individuals and organizations. It then examines the impact of expenditures for different types of education on the finances of governments. Lastly, the paper considers policy issues, including inter-governmental problems, arising from existing methods of financing education.

Because of the high priority given to formal education in the 1962-68 national development plan, explanation of the plan's construction, as well as appraisals of its suitability—including the question of internal and external financing—are of interest to this study of the financing of education in Nigeria.

A symposium of views on the plan is published in the *Nigerian journal of economic and social studies*, vol. 4, no. 2. Ibadan, University Press, July 1962. Leading the contributions to the symposium are those of two economists intimately concerned, at the national level, with the technical side of the plan's creation: W. F. Stolper. 'The main features of the 1962-68 development plan', and L. M. Hansen. 'Methods of economic programming and analysis in the plan'. Articles in the same issue, and of special relevance here, are those of O. Aboyade. 'A general critique of the plan', and J. O'Connell. 'Some social reflections on the plan'. Further essays are printed in the *Journal of local administration overseas*. London, HMSO: one by A. Rivkin. 'Economic development planning in Nigeria', vol. III, no. 1, January 1964; and another by F. J. Moore. 'Development planning in Eastern Nigeria', vol. III, no. 4, July 1964.

The integration of external assistance with educational planning in Nigeria

L. Cerych

Foreword

External assistance for education in developing countries will in most cases not represent more than a small fraction, usually not over 5 or 10 per cent, of their total educational expenditures (though there are important exceptions). Thus, a central problem for educational planning is how to get the maximum effect from this marginal amount, in terms of its contribution to over-all educational development in both the short and long run.

Logically, the correct strategy seems clear enough. The greatest multiplier effect could be attained by focusing external assistance (a) on breaking strategic bottle necks to educational development which the recipient country does not itself have the means at present to break, (b) upon such things as research and experimentation and pilot projects which can have a spreading and long-run effect, and (c) perhaps most importantly, on strengthening educational planning itself, for without a clear road map of where it wishes to go in education, and what is required to get there, a developing country is in a poor position to know what aid to ask for or how to make the best use of that which it receives.

All these, if successful, could contribute for years to come to the more productive use of the recipient country's own educational resources. By the same logic, the less attractive though none the less useful alternative would be for external assistance merely to add a modest supplement to what the recipient country is currently able to do with its own resources.

In practice, of course, things are not this simple; a variety of practical problems—for both recipients and donors—impede the application of this clean logic. To name but a few of these familiar problems, there is, to start with, that of reaching rational priorities on what forms of aid to request and, on the other side, that of trying to respond affirmatively and efficiently to such requests. There is the problem of multiple sources of assistance, each with its own strengths and limitations, its own ideas and procedures, which sometimes engenders confusion and competition, waste and misunderstanding. There is also the problem of timing—the frustrating time consumed in preparing proposals, getting them accepted, then finally

getting action (by which time the earlier needs and priorities may have shifted). And there is, of course, the delicate problem of politely saying no to proffered forms of aid which are considered to be useless or even worse, and the reverse one of declining aid requests which appear ill-considered.

These are but a few of the problems involved in trying to make the most effective use of external assistance. Fortunately, a good deal of progress has been made in recent years toward dealing with them more satisfactorily, as the participants have gained more experience in this important branch of international co-operation. But more progress is still needed, and one major way to achieve it is through a more systematic research effort to extract the hard-earned lessons from past experience. Without such an effort the costly lessons of the past have a way of evaporating and the same lessons have to be learned over and over again. By their very nature, the agencies concerned tend to have poor memories; they are too busy with the future to reflect on the past, and their high personnel turnover scatters acquired knowledge to the winds before it can be analysed.

Anyone attempting such analysis, however, will quickly discover that accurate and comparable facts are hard to come by, not because people are unwilling to provide them but because, in the nature of things, good factual records for this purpose are rarely kept. Even to arrive at a reasonably accurate estimate of the total educational assistance received by some country in a given period, or the total dispensed by any donor agency in that period, and then to reconcile the two estimates, is a major challenge to any analyst's ingenuity. When one goes further and attempts to trace what actually happened to the aid, the going gets even harder.

With a view to probing some of these problems which bedevil educational planners and aid analysts, the Institute asked Ladislav Cerych to undertake two pilot studies, one in Nigeria which is reported here, and one in the Ivory Coast (published separately, in French only.) The aim was neither to pass judgement on whether the particular aid was good or poor, nor to give advice to these countries on how to handle aid in the future. Rather, the aim was simply to find out what happened and to analyse this body of experience in the hope that it might offer useful lessons to other countries more or less similarly situated. The Institute's interest above all was to discover how educational planning might be used as an instrument for improving the efficiency and effectiveness of the whole aid process.

Thanks to the generous co-operation of the Nigerian authorities and various aid agencies, for which the Institute and the author are most grateful, Mr. Cerych has been able to come up with an interesting analytical picture of the educational assistance received and used by Nigeria, following its independence in 1960. His general approach and the methodologies he used—for example, in estimating the total size and the pattern of distribution of educational assistance, including the circumnavigation of major statistical pitfalls—should provide useful suggestions for other countries anxious to examine and improve their own situations. His exami-

nation of Nigeria's ingenious efforts to co-ordinate educational aid requests from various quarters within Nigeria, and then to harmonize aid received from various external sources, is of particular interest.

One can hardly escape the implicit conclusion of this monograph that external assistance will be of greatest benefit to developing countries once they have formed a clear and comprehensive view of the direction they wish to follow in their educational development, as an integral part of over-all national development, and once they have plotted a rational course and set the necessary priorities for achieving these goals. In short, a well-conceived educational plan is an indispensable instrument for orchestrating domestic and external resources and for getting maximum educational results from the two combined.

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Introduction

External assistance is of paramount importance to educational planners in developing countries at almost every stage of their work. The very financing of educational development is, more often than not, dependent on external aid; the gap between the demand for and the supply of teachers, particularly at the secondary and post-secondary levels, can seldom be filled except by expatriates provided under various foreign aid schemes; the scholarships for study abroad, also provided under such schemes, play a crucial role in the planning of post-secondary and higher education; even the process of educational planning itself must often be carried out with the help of experts put at the disposal of the planning country by various bilateral or international technical assistance schemes.

However, it is probably because external aid is so closely interwoven in the fabric of educational planning that little effort has so far been made to analyse the problems to which it gives rise. The aim of the present study is to contribute to the filling of this gap in one specific country, Nigeria, and to examine the role played by external aid in the development of education in that country in recent years, to analyse the policy and the methodological problems to which it has given rise, and to uncover the links between external aid and educational planning.

Historical background

A full understanding of the problems of external aid in the context of education in Nigeria would require some knowledge of the geographical, historical, economic, political and social background of that country. For obvious reasons, we shall limit ourselves to the consideration of certain historical factors which bear more particularly on the subject under study.

Most of contemporary education in Nigeria started as a private effort, mainly of missionary societies, and the role of these institutions, called voluntary agencies,

remains preponderant even today; of some 15,000 primary schools with 2.9 million pupils in 1963, over 10,000 with 2.25 million pupils were run by voluntary agencies; of the 212,000 secondary general pupils, 170,000 are enrolled in private schools.

But though the educational system in Nigeria was implanted from outside the country, it cannot be said to have been a product, even in its first phase, of external aid in the present sense of the term. One of the basic principles of United Kingdom colonial policy was that expenditure on education as well as on other social services should be financed exclusively from local resources, at least as far as recurrent expenditure was concerned; and the initiators of the first schools in Nigeria were not only missionaries, but also Nigerians themselves or other Africans, often liberated slaves who had been in prolonged contact with Europeans or Americans. The desire for education—and the habit of paying for it—is something that has been rooted in Nigerian tradition for well over a century. Understandably enough, the development of education was greatly influenced by the United Kingdom model.

It should be noted also that private education in Nigeria, whether denominational or not, is supported mainly from local and national resources, of which the greatest part are public grants. It receives very little external aid, the amount of which it is impossible to ascertain. Private education is, therefore, not included in this study.

Conceptual framework

For an educational planner, external aid in particular and international co-operation in general represents in the first place one of the resources available to the country for expanding, maintaining or directing its educational system. As such, they constitute one of the inputs (or inflows) of this system, the nature of which any systematic inquiry has to define and analyse.

In the first place, this input has a specific volume. It can be expressed in monetary or in manpower terms, either in absolute figures or as a proportion of the over-all national effort. It can be broken down by origin (multilateral or bilateral aid, or according to the aid-providing agencies), by destination (levels and types of education to which it is directed), by geographic distribution or in several other ways (e.g., aid to recurrent or capital expenditure, loans or grants).

Chapter 1 shows why a better knowledge of the total volume of external aid and of its various breakdowns is useful, if not indispensable, to an educational planner, and indicates the total volume of external aid to Nigeria and its composition. The input of external aid can take the form of (a) supply of expatriate teachers; (b) scholarships for studies abroad or at home; (c) supply of educational

equipment and (d) financing of institutions or of particular sectors of education. The role of these different forms of aid and the problems associated with them in Nigeria will be discussed in Chapters 2, 3 and 4. The fifth form of external assistance, namely the supply of personnel in charge of assisting in the administration and the planning of education, will be examined in Chapter 7. Many forms of external aid imply a transfer of educational programmes and methods. These transfers create a series of problems which will be discussed in Chapter 5.

Finally, the input of external aid represents not one, but a multiplicity of inflows corresponding to the multiplicity of external aid resources. The inflows may be complementary or they might mutually conflict. All are subject to particular institutional requirements. In this connexion problems concerning the co-ordination of external aid, questions of administration and other procedures as well as of organizations established to cope with offers and requests for external aid will be analysed in Chapter 6.

The key point of this report, the impact of the external aid flow on the educational planning process, will be discussed throughout as well as in a special, concluding chapter. Problems discussed in this study are mainly those arising in connexion with the transfer of capital, goods and services for which the financing is provided, at least partly, from outside, non-Nigerian resources. It is solely in this sense, without implying any value judgement whatsoever, that the terms 'external aid' or 'assistance' used throughout should be understood. On at least two important occasions—when dealing with expatriate teachers and with Nigerians studying abroad—the discussion covers problems where there may be no external, but only Nigerian financing.

Present external aid to Nigerian education and all international co-operation taking place in this connexion are in many ways very new phenomena because of their scale and because they involve an unprecedented multitude of organizations and countries. Yet what will be said in the subsequent chapters should not be interpreted merely as an account of innumerable difficulties and problems which this new situation has created. In fact, an external observer may often find himself less impressed with the difficulties and problems than with the fact that, given the newness and complexity of it all, things have gone as well as they have.

1 Assessing the amount and distribution of external aid

Because external aid represents one of the main educational inputs in developing countries, it is essential to ascertain its total amount as well as its distribution between the various sectors of the educational system. Only a detailed knowledge of the amount of aid available in the past and at present will give the educational planner a basis for a realistic evaluation of the amount of aid he can count on in the future. Naturally, extrapolation of past trends is not a sufficient guide to the future, for the future trend will be affected by political factors, balance of payments considerations, the attitudes of the donor countries or organizations, etc. But, in general, such factors change only slowly, and it would be unrealistic for a country to expect that it will receive during the next few years twice the amount of aid it has received in the past.

This misapprehension actually occurred in Nigeria. The current development plan (1962/63 to 1968/69) was based on the assumption that 50 per cent of all capital expenditure would be covered by foreign aid. With capital expenditure on education set at £69.8 million, it was assumed that some £35 million, or almost £6 million a year, would be provided by external aid. Indeed, educational projects being generally more attractive to foreign donors than other projects, it might have been assumed that external resources would cover an even greater proportion of capital expenditure. Had data on foreign aid in the past been better known, it would have been clear that the assumptions of the plan were probably too optimistic; for, in 1962, Nigeria received from external sources probably less than £2 million for capital expenditure on education. In fact, during the first two years of the plan, finance from abroad covered only 15 to 20 per cent of capital expenditure on education.

A precise knowledge of the amount of external aid and of its distribution is also indispensable for assessing the effectiveness of this aid and for formulating a policy aimed at its more effective utilization. If, for instance, there are reasons to believe that the total amount of aid cannot be increased significantly in the near

future, it may be possible to direct whatever amount is available into sectors of education which have priority for economic or other reasons.

However, assessing the amount of foreign aid is by no means a simple and straightforward task. In a certain sense, it can be said that all aid for development can contribute to educational development, because it releases in the recipient country a certain amount of internal resources which can be devoted to education. In this sense, any aid project can, in the last analysis, have the same effect as an educational aid project. It is, however, impossible, to determine with precision when such an internal transfer of resources really takes place. It is better, therefore, to consider exclusively aid earmarked for education, remembering, however, that the latter can also benefit indirectly from other non-educational aid projects. Even so, the difficulties in ascertaining the value of educational aid are by no means negligible. For it is not only the amount, but also the value of aid which must be considered, and the two are not necessarily the same.

Amount and value of external aid

The first difficulty in ascertaining the amount of foreign aid lies in the general lack of data in this field. In Nigeria, in particular, this lack of data results largely from the multitude of recipients—federal government, regional governments and, within each region, several ministries, institutions, and sometimes even individuals. As there is no common accounting centre where all external contributions would obligatorily be registered according to well-defined criteria, any compilation must be based on the individual declarations of the recipients.

Nor is the situation any better on the side of the donors. Few of the aid agencies are able to state the monetary value of the assistance they provide. Often this assistance is financed by several organizations, private or public, or represents a juxtaposition of different schemes, each of them supported by different sources and only administered from one centre. In Nigeria, at least two if not three of the four major donors, and the majority of the smaller ones, are unable to evaluate with any degree of accuracy the monetary value of their contribution to Nigerian education.

Another difficulty is due to the fact that most of the external aid contributions are made in the form of block grants or loans for a period of several years and, in most cases, the accounting systems of both donors and recipients do not provide any information about the amount disbursed in any one year. This means that very often averages have to be used.

But perhaps the greatest difficulty results from the fact that any item of external aid may have a different monetary value to the donor and to the recipient. A Peace Corps volunteer, for instance, costs the United States Government some

£3,000 a year; but if the Nigerian Government employed a Nigerian graduate instead, it would have to pay him only £700 a year. The Peace Corps contribution represents, therefore, to the Nigerian Government a saving of only £700 per volunteer. Of course, this *value to Nigeria* concept as contrasted with the *cost to the donor* concept, is based on the hypothetical assumption that Nigeria has a choice between receiving a foreign volunteer or employing a Nigerian—which is probably not the case at present. In other words, if no Peace Corps teachers were available, Nigeria would have to hire other expatriates, cover their travelling expenses and pay them much more than £700 a year, though probably less than £3,000 including travel. This introduces a third possibility of evaluating the external aid contribution, the *replacement cost* concept. The Peace Corps is only one example; two or three different price tags can be attached to almost any item of external aid—teaching personnel, experts, educational equipment, etc.

Any type of evaluation will have its advantages and its drawbacks. The 'cost to the donor' concept is technically the most convenient one, because the relevant data are the most easily available. It is for this reason that it has been used in the present study, even though it inflates in some ways external aid contributions quite considerably. The 'value to Nigeria' concept is probably the most interesting from the point of view of the educational planner, but its drawbacks lie in that it neglects some of the basic facts of the present situation, such as the lack of qualified manpower and of financial resources. Also, with this approach, certain external contributions may appear as nil in value; thus, for instance, the United Kingdom volunteer teacher, who costs the United Kingdom Government some £900 a year, would not be counted as an external contribution because he receives in addition £700, i.e., the equivalent of a Nigerian salary, from the Nigerian Government. The 'replacement cost' concept is, in a sense, the most objective one, but technically it is very difficult to calculate; with few exceptions, such as that of the Peace Corps volunteers, the 'replacement cost' value will come rather close to the 'cost to the donor' value.

These different ways of evaluating external aid contributions are of great relevance to the future financing of the educational system. Obviously, the planner would be over-pessimistic if he were to assume that the replacing of foreign aid will eventually cost the country as much as it costs the donors today. Taking a simplified example which probably ignores future increases in teachers' salaries, the future substitution of the 500 Peace Corps teachers working in Nigeria in 1965 by 500 Nigerians will represent an expenditure of £350,000, and not of £1.5 million, which is what the programme costs the United States Government today.

Such calculations are naturally only valid for the time when enough nationals will be available to replace expatriates. Meanwhile, the planner must put on the foreign aid contribution a value which lies somewhere between the present high cost to the donor and the estimate of the low value to the recipient. Let us suppose,

for instance, that in 1965, various external agencies provided Nigeria with 1,000 teachers at a cost of £3 million. Let us assume, further, that equally well-qualified Nigerians, when available, would cost Nigeria £1.5 million. Taking into account the output from national institutions and studies abroad as well as the manpower situation, the planner estimates that 200 teachers can be produced every year to replace the expatriates entirely five years hence, i.e., in 1970. Lastly, let us assume that, for one reason or another, Nigeria does not wish to receive external aid in the form of teachers and decides to hire forthwith 1,000 expatriate teachers at the same cost as the present cost to the donors. Thus, in 1966, the country will have 800 expatriate teachers costing £2.4 million and 200 Nigerian teachers costing £0.3 million; in 1967, there will be 600 expatriates costing £1.8 million and 400 Nigerians costing £0.6 million; and so on until, in 1970, all 1,000 teachers will be Nigerians costing £1.5 million.¹ As can be seen, the planner, when reflecting on a future educational expenditure which is to replace the present external aid contribution, will have to apply to the latter a coefficient decreasing in accordance with the availability of national resources; in this particular case teachers. In the above example, the coefficient to be applied is 1.0 for the reference year, 1965, 0.9 for 1966, 0.8 for 1967, and so on until 1970, when the coefficient becomes 0.5. In other words, when estimating future costs of substituting Nigerian personnel or equipment for foreign personnel or equipment, the 'value to Nigeria' concept will be the most appropriate. But so long as this substitution is not practicable, an estimate based on the 'cost to the donor' concept or something approaching it is the more realistic since it represents the expenditure which the country would have to incur if foreign aid were suddenly withdrawn and existing projects were to be maintained.

In view of the preceding considerations, it is obvious that any estimate of the total amount of external aid for education received by Nigeria can be no more than very approximate. But in the absence of any precise data, even such an estimate should prove useful to the educational planner.

It may be mentioned that the Nigerian Government fully realizes the drawbacks of this situation and has tried, through the Bureau for External Aid, to ascertain the total yearly amount of external aid as well as its distribution by source, geographic destination and levels and types of education. The results of this accounting exercise are, however, still confidential. More recently, the National Universities Commission has undertaken a comprehensive listing of external aid to Nigerian universities.

For our purpose, external aid to education means any contribution, including grants, loans, goods and services, for which no payment has to be made from Nigerian sources, except contributions made to on-the-job training and adult

1. All these figures, it should be stressed, are given only in order to clarify the methodology of evaluating external aid; they should in no way be considered as actual projections.

education. This rather narrow definition of education, as opposed to the larger concept of human resource development, is motivated solely by the necessity of limiting the already wide scope of the present inquiry. This in no way diminishes the importance of schemes such as those furthered by Unesco or the British Council for the creation of public libraries.

The use of monetary terms is not necessarily the only or even the best way of expressing the value of external aid; in the case of expatriate teaching personnel, for instance, the use of man-months may give a better idea of the value of external assistance. Only monetary terms, however, can serve as a common denominator for the various forms of aid, such as teachers, scholarships, equipment, etc., which, added together, provide a meaningful picture of the role which external aid plays in the educational development of the country concerned.

As far as Nigeria is concerned, investigations undertaken in connexion with the present study lead to the conclusion that, in 1964, the total amount of external aid was of the order of £6.2 to £7.7 million. This estimate is based largely on an evaluation of the cost of programmes financed by various donors operating in Nigeria.¹ In certain cases it was possible to make use of average unit costs (e.g. of volunteer teachers or of studies abroad).

The distribution of external aid

The distribution of external aid between the different levels and sectors of the educational system is shown in Table 1.

The data in the table were obtained in the same way as the global figure, and are based on the cost to the donor. It proved impossible to establish what the corresponding figures would be in terms of the 'value to Nigeria' concept. It is clear, however, that the difference between the cost to the donor and the value to Nigeria will arise mainly with regard to expatriate teachers. Taking into account their number, it would be possible to estimate the 'value to Nigeria' of total external aid very approximately at between £4 and £5 million, or, to be on the safe side, at between £3.5 and £5.5 million.

As can be seen from the table, by far the greater part of external aid goes to secondary education, teacher training and the universities. For reasons which will appear later in this study, technical education receives a surprisingly small proportion of external aid. The high figure for secondary education is due to the large contingent of volunteer teachers and to the foreign support of two comprehensive

1. The relevant figures were obtained partly from unpublished or confidential reports, partly through personal interviews, and this makes it impossible to produce the evidence and give the usual references. Such references would have to indicate the contribution of each donor, and neither the Nigerian authorities nor some of the donors are willing to have such figures made public.

TABLE 1. Estimated distribution of external aid to education in Nigeria by level, 1964

Level	£ thousand		Percentages	
Primary	180	to 250	2.9	to 3.2
Secondary	1 700	1 860	27.4	24.1
Teacher training	1 200	1 400	19.4	18.2
Technical	290	310	4.7	4.0
Universities	1 500	1 840	24.2	23.9
Advisory services ¹	640	1 050	10.2	13.6
Scholarships	700	1 000	11.2	13.0
Total	6 210	7 710	100.0	100.0

1. Includes the cost of different advisers to ministries of education, of planning teams and missions, etc., as well as assistance to schemes such as the development of educational television or of aptitude testing

schools; teacher-training benefits from external aid mainly through the support of five advanced teacher-training colleges; the universities receive aid in the form of large capital grants.

Geographically, aid seems to be distributed almost equally among the Northern, Eastern and Western (including the Mid-Western) regions, in spite of the considerable differences in size and population between these regions; each of them receives 20 to 25 per cent of total assistance, the remainder going to federal institutions.

As far as the origin of external aid is concerned, about 10 to 15 per cent of the total comes from international organizations, 10 to 15 per cent from private organizations and 70 to 80 per cent from bilateral agencies.

In 1964, only a relatively small part of external aid was used for capital expenditure, some 70 to 80 per cent representing recurrent expenditure. This was due largely to the fact that most of the large capital grants were either made before 1964 or due to be made in 1965 and the following years.

It is clear that some of the above figures would have been very different had the calculations been made on the basis of the 'value to Nigeria' concept. Thus, secondary education would have represented some 15 per cent of the total instead of 24 to 27 per cent, and the share of capital expenditure in external aid would have amounted to between 40 and 50 per cent instead of 20 to 30 per cent.

External aid and total educational expenditure

What then is the relative importance of external aid in Nigeria's total educational expenditure?

In 1962/63, the federal and regional governments spent £31 million on education, and an additional £10 to £11 million were provided by the local authorities and

private sources, mainly in the form of fees. Thus, the total national expenditure on education amounted to some £42 million. Figures for 1963/64 were not available at the time of the present inquiry so that the only way of estimating expenditure in 1963/64 was by extrapolation of past trends on the basis of an average yearly growth rate of 10 per cent (in current prices) between 1958 and 1963. The figure for national expenditure would then be £46 million in 1963/64. If we add external aid as computed in Table 1, the total expenditure on education in Nigeria would amount to between £52 and £53.5 million, of which external aid would represent 12 to 15 per cent.

As far as the various levels and types of education are concerned, it would appear, from all available information, that foreign aid represented about 0.9 to 1.1 per cent of expenditure on primary education, 13 to 14 per cent for secondary education, 13 per cent for technical education, 21 to 24 per cent for teacher training and 18 to 21 per cent for higher education. These figures are again based upon the cost to the donor, and they do not, therefore, indicate the magnitude of the financial effort needed in the future to replace these foreign aid contributions by national resources. This effort must be estimated on the basis of the value to Nigeria, which shows the contribution of foreign aid as amounting to only 7 to 10 per cent (instead of 12 to 15 per cent) of total educational expenditure. The corresponding figures for the various levels and types of education are 0.8 to 0.9 per cent for primary education, 7 to 8 per cent for secondary education, 10 to 11 per cent for technical education, 10 to 12 per cent for teacher training and 16 to 18 per cent for higher education.

This 'devaluation' of the contribution made by external aid does not, of course, imply any decrease in the present value and importance of such aid; it is simply a method of evaluating realistically the magnitude of the national effort which will be required in the future to replace foreign aid. But, if the planner is to be in a position to make such a realistic evaluation, he must know exactly the amount of foreign aid and its distribution, even if it is completely free. Thus appointments filled by expatriate teachers who are not being paid by the receiving country should be shown on establishment lists with hypothetical salaries of national staff if and when they fill the appointments; otherwise, the Ministry of Finance and Establishment may well be unwilling to allow for the appointment of Nigerian teachers to replace the expatriates in due course.

Before Nigeria became independent in 1960, external aid went mostly to higher education. The first important grant was made in 1948, when the United Kingdom Colonial Development and Welfare Fund earmarked £1.5 million for building the University College of Ibadan. Smaller grants were made to the same institution in the 1950s by other donors, particularly large private foundations. In 1958,

the United States Government began to support the establishment of a new university at Nsukka in the Eastern Region. After independence and until 1964, external aid was increasing very rapidly with the intervention of new donors, particularly the various United Nations organizations, and the emphasis shifted from higher education to secondary education and teacher training, a trend which is still continuing.

An inquiry into the policies of the major donors seems to indicate that, for the next few years, many of them expect to stabilize the amount of aid granted at the 1964 level; a substantial increase in external aid to Nigerian education cannot, therefore, be expected in the immediate future. However, commitments made in 1964 and before, and which have not yet materialized, may increase the totals for 1965 and 1966. There is, in particular, the International Development Association (IDA) credit of £7.1 million attributed in 1964 and a grant of £5 million made in 1961 by the United Kingdom Government but of which less than £1 million had been spent by the beginning of 1965. These funds will be used partly for the development of technical schools. This will mean an important increase in the share of external aid in this type of education, which, in the past, proved rather unattractive to foreign donors.¹

1. All data on Nigerian educational expenditure used in this chapter are based on the study of A. Callaway and A. Musone, *Financing of Education in Nigeria*, which forms the second section of the present volume (pp. 85-230).

2 The supply of teachers

The strategic importance of teacher supply, adequate in both quality and numbers, needs hardly to be stressed here. A drastic reduction in external funds for school building or studies abroad would create great difficulties; but a sudden departure of a large number of expatriate teachers would represent for Nigeria a much more serious setback. This is shown clearly in Tables 2, 3 and 4.

Several significant conclusions can be drawn from these tables. First, an overwhelming proportion of the 3,019 expatriate teachers in Nigeria in 1963, 80 per cent exactly, are in secondary education; the remainder are in higher education (14 per cent) and in primary education (6 per cent).

Second, the number of expatriate teachers with lower qualifications (non-graduates in secondary education, lower-level staff in universities) is diminishing rapidly in both absolute and relative terms, while the number of expatriate teachers with higher qualifications has rapidly risen in absolute figures and remained more or less the same in relative ones. In other words, the africanization of the teaching staff, virtually completed at the primary level, is affecting mainly the less qualified staff at the secondary and higher levels. No doubt, the number of highly qualified Nigerians at these two levels has increased; in 1963, for instance, there were 1,166 graduate Nigerian teachers in secondary education, against 851 in 1961, and 248 Nigerian university teachers, against 159 in 1962; yet the proportion of expatriates remained unchanged owing to the rapid expansion of education.

Lastly, there are wide differences between the various regions; the role played by expatriates is far more important in the North than in the West, with the East occupying an intermediate position.¹

The distribution of expatriate teachers by nationality is available only for the Northern Region, which, in this respect, may be considered as more or less

1. Figures for the Mid-West were not available at the time of the inquiry.

TABLE 2. Teachers by nationality and by type of secondary education in Nigeria, 1963

Secondary education		Eastern Region			Northern Region			Western Region ¹			Lagos			All of Nigeria		
		Graduates	Non-graduates	Total	Graduates	Non-graduates	Total	Graduates	Non-graduates	Total	Graduates	Non-graduates	Total	Graduates	Non-graduates	Total
Grammar	NOR	283	1 230	1 513	34	170	204	449	1 119	1 568	93	226	319	859	2 745	3 604
	EXP	516	42	558	356	50	406	537	52	589	106	18	124	1 515	162	1 677
	TOTAL	799	1 272	2 071	390	220	610	986	1 171	2 157	199	244	443	2 374	2 907	5 281
	%	64.6	3.3	26.9	91.3	22.7	66.6	54.5	4.4	27.3	53.3	7.4	28.0	63.8	5.6	31.8
Commercial	NOR	22	225	247	.	.	.	.	.	.	19	127	146	41	352	393
	EXP	25	3	28	.	.	.	.	.	.	7	3	10	32	6	38
	TOTAL	47	228	275	.	.	.	.	.	.	26	130	156	73	358	431
	%	53.2	1.3	10.2	.	.	.	.	.	.	26.9	2.3	6.4	43.8	1.7	8.8
Technical and vocational	NOR	10	42	52	—	139	139	4	29	33	56	50	106	70	260	330
	EXP	19	—	19	6	81	87	6	16	22	16	23	39	47	120	167
	TOTAL	29	42	71	6	220	226	10	45	55	72	73	145	117	380	497
	%	65.5	—	26.8	100.0	36.8	38.5	60.0	35.6	40.0	22.2	31.5	26.9	40.2	31.6	33.6
Teacher training	NOR	110	491	601	8	200	208	70	575	645	8	41	49	196	1 307	1 503
	EXP	77	35	112	177	107	284	74	16	90	23	—	23	351	158	509
	TOTAL	187	526	713	185	307	492	144	591	735	31	41	72	547	1 465	2 012
	%	41.2	6.7	15.7	95.7	34.9	57.7	51.4	2.7	12.2	74.2	—	31.9	64.2	10.8	25.3
Total secondary ²	NOR	425	1 988	2 413	42	509	551	523	1 723	2 246	176	444	620	1 166	4 664	5 830
	EXP	637	80	717	539	238	777	617	84	701	152	44	196	1 945	446	2 391
	TOTAL	1 062	2 068	3 130	581	747	1 328	1 140	1 807	2 947	328	488	816	3 111	5 110	8 221
	%	60.0	38.1	23.0	92.8	31.9	58.5	54.1	4.6	23.8	46.3	9.0	24.0	62.5	8.7	29.1

NOR = Nigerians
EXP = Expatriates
TOTAL = Total number of teachers
% = Percentage of expatriates in total

NOTES
1. Including the Mid-western Region
2. Teachers in secondary modern schools are not included

SOURCE
Federal Ministry of Education Statistics of
Education in Nigeria, 1963

Not applicable
— Negligible

TABLE 3. Percentage of expatriates in teaching staff of Nigerian secondary institutions, 1961/64

Secondary education		Eastern Region			Northern Region			Western Region ¹			Lagos			All of Nigeria		
		Gradu-ates	Non-gradu-ates	Total	Gradu-ates	Non-gradu-ates	Total	Gradu-ates	Non-gradu-ates	Total	Gradu-ates	Non-gradu-ates	Total	Gradu-ates	Non-gradu-ates	Total
Grammar	1961	47.0	3.5	22.0	93.6	83.7	88.7	44.0	3.2	18.5	53.0	12.6	34.8	53.2	12.2	29.4
	1962	63.5	3.7	30.4	91.6	21.0	68.0	51.5	2.9	23.9	52.8	6.0	27.4	62.2	4.7	31.5
	1963	64.6	3.3	26.9	91.3	22.7	66.6	54.5	4.4	27.3	53.3	7.4	28.0	63.8	5.6	31.8
	1964	63.5	3.2	25.5	94.0	16.8	62.5	48.7	4.8	23.6	50.6	6.9	28.3	61.8	5.1	29.3
Commercial	1961	—	—	—	.	.	.	.	.	.	30.4	1.9	7.1	30.4	1.9	7.1
	1962	52.6	1.4	8.9	.	.	.	.	.	.	19.0	0.9	3.6	40.7	1.2	7.1
	1963	53.2	1.3	10.2	.	.	.	.	.	.	26.9	2.3	6.4	43.8	1.7	8.8
	1964	37.9	1.8	9.3	100.0	2.3	4.4	.	.	.	27.7	3.6	8.6	34.7	2.4	8.7
Technical and vocational	1961	65.6	—	32.3	100.0	45.6	47.7	—	62.0	62.0	56.0	47.7	50.0	66.1	43.0	46.7
	1962	60.6	—	40.4	100.0	11.2	25.0	—	40.4	40.4	36.8	38.2	37.8	75.0	29.1	37.6
	1963	65.5	—	26.8	100.0	36.8	38.5	60.0	35.6	40.0	22.2	31.5	26.9	40.2	31.6	33.6
	1964	28.7	53.3	16.3	100.0	41.4	45.1	53.3	16.3	25.9	10.3	24.7	17.6	34.0	31.6	33.6
Teacher training	1961	51.4	7.5	16.6	96.9	36.1	53.5	55.0	4.9	11.4	—	3.1	2.7	64.3	10.8	17.1
	1962	44.6	7.1	16.0	96.7	33.8	56.0	52.8	5.5	13.2	69.6	—	22.5	65.0	10.9	23.8
	1963	41.2	6.7	15.7	95.7	34.9	57.7	51.4	2.7	12.2	74.2	—	31.9	64.2	10.8	25.3
	1964	42.0	8.0	17.4	96.8	32.4	56.5	50.0	4.5	15.7	54.5	—	30.4	64.6	13.3	29.2
Total secondary	1961	48.8	5.2	20.4	94.8	54.4	67.7	45.6	4.9	16.7	48.8	15.5	27.6	55.4	14.0	27.4
	1962	60.3	6.4	25.6	93.7	23.9	55.3	51.7	5.1	21.2	50.4	7.9	23.4	62.6	8.4	28.5
	1963	60.0	38.1	23.0	92.8	31.9	58.5	54.1	4.6	23.8	46.3	9.0	24.0	62.5	8.7	29.1
	1964	58.9	4.3	22.8	95.1	28.4	55.6	48.9	5.0	22.1	40.4	8.7	22.8	60.1	8.7	28.1

¹ Including the Mid-Western Region

. Not applicable — Negligible

TABLE 4. Academic staff in Nigerian universities by nationality, 1962/64

	Nigerians		Non-Nigerians		Total		% of non-Nigerians in total	
	1962/63	1963/64	1962/63	1963/64	1962/63	1963/64	1962/63	1963/64
<i>Ahmadu Bello</i>								
High-level ¹	1	2	31	35	32	37	97	95
Middle-level ²	11	16	44	53	55	69	80	77
Total	12	18	75	88	87	106	86	83
<i>Ibadan</i>								
High-level	16	21	74	87	90	108	83	81
Middle-level	34	55	75	89	109	144	69	62
Total	50	76	149	176	199	252	75	70
<i>Ife</i>								
High-level	4	3	9	11	13	14	69	79
Middle-level	22	30	16	23	38	53	42	43
Total	26	33	25	34	51	67	49	51
<i>Lagos</i>								
High-level	3	12	11	19	14	31	79	61
Middle-level	9	14	2	5	11	19	18	26
Total	12	26	13	24	25	50	52	48
<i>University of Nigeria (Nsukka)</i>								
High-level	5	8	46	51	51	59	90	86
Middle-level	54	87	51	49	105	136	49	36
Total	59	95	97	100	156	195	60	51
<i>All Nigerian universities</i>								
High-level	29	46	171	203	200	249	86	82
Middle-level	130	202	189	219	319	421	59	52
Total	159	248	360	422	519	670	70	63

NOTES

1. Professors, readers, senior lecturers and associate professors
2. Lecturers, assistant lecturers, teaching assistants

SOURCE

Federal Ministry of Education, *Statistics of Education in Nigeria, 1963*

representative of the whole country. In all forms of post-primary non-university education, there were, in 1963, teachers of eighteen foreign nationalities, of which more than 50 per cent were British, 26 per cent American, 9 per cent Irish, 4.5 per cent Canadian, 2.5 per cent Pakistani and 2 per cent Indian.¹

The distribution in universities seems not less international, as shown from the example of the University of Nigeria in Nsukka. The expatriate academic staff is composed of fifteen nationalities; 50 per cent of its members are American, 20 per cent British, 10 per cent Indian and 8 per cent Dutch.² Thus, notwithstanding the historically dominant role of the United Kingdom teacher, Nigeria has been successful in internationalizing its teaching staff. This trend is being maintained, particularly with regard to teachers financed by foreign aid.

1. Data supplied by the Northern Ministry of Education.

2. The proportion of Americans is considerably smaller in Nigerian universities other than Nsukka.

The situation in Nigeria with regard to expatriate teachers is not very different from that in other English-speaking African countries. In Ghana, for instance, about two-thirds of all graduate secondary-school teachers in 1962/63 were expatriates, and in Uganda some four-fifths. On the other hand, it should be noted that in French-speaking African countries expatriates represent 95 to 100 per cent of teaching staff at the secondary and higher levels.

It is important to stress that not all the expatriate teachers in Nigeria are financed by foreign aid. Out of a total of over 3,000 expatriate teachers in 1964, only about 900 to 1,000 were subsidized wholly or partly from abroad. In 1965, the number rose to some 1,500 owing to the introduction of the schemes for 'topping up' salaries.¹ The remaining expatriates (i.e. about 50 per cent of the total) are paid wholly by Nigeria on the basis of contracts, many of which may be extensions of the former colonial service. It can be argued, of course, that even in such cases there is an element of external aid present since many of the expatriates, though paid entirely by Nigeria, continue to benefit from various pension schemes, gratuities and other advantages relating to tenure in their home countries. Such benefits cannot always be quantified, although without them expatriates might not have been prepared to serve abroad.

Among the various schemes of external aid, there are three major categories: (a) the volunteer schemes, in particular, the American Peace Corps, the British Voluntary Service Overseas (VSO), and the Canadian Universities Service Overseas (CUSO); (b) the schemes which tie teachers to specific aid projects, such as the advanced teacher-training colleges financed by the United Nations Development Programme² or the US-AID's Comprehensive High Schools; (c) the various bilateral technical assistance or other agreements, such as the British 'Teachers for Nigeria' scheme, or the Canadian Technical Assistance scheme.

As will be seen later, the distinction between categories (b) and (c) is not a very sharp one; in a sense, all expatriate teachers are tied to specific projects.

In the second half of 1965, the total number of expatriate teachers under these schemes was 1,480, distributed as follows: 665 volunteers, of which 530 were Peace Corps, 110 VSO and twenty-five CUSO; 190 teachers supplied for specific projects; 200 United Kingdom 'Teachers for Nigeria'; 350 teachers supplied by the United Kingdom 'Topping up scheme for university teachers'; twenty by the different United Nations technical assistance programmes (in particular EPTA); and fifty-five by the various bilateral technical assistance schemes.

1. The amount of foreign aid devoted to financing salaries, or part of salaries, transport-housing, etc., of expatriate teachers is not available, but in the largest external aid projects, such as the advanced teacher-training colleges financed by the United Nations Development Programme, they represent between 70 per cent and 75 per cent of the total amount of aid provided. The cost of the volunteer teachers alone represents about 20 per cent of the total volume of educational aid to Nigeria (in 1964).

2. Until 1 January 1966, this was known as the United Nations Special Fund.

The volunteer schemes

Most of the volunteers are new university graduates without previous professional experience, working for relatively low salaries in the schools of the host country where they are placed in accordance with the decisions of the host government. American and Canadian volunteers stay, in principle, for two years, British, for one year only. The living allowance of the British and Canadian volunteers is paid by the Nigerian Government, the American volunteers, by the Peace Corps itself.

The Peace Corps programme in Nigeria started in 1961 with 107 volunteers, and grew to a total of 626, of which 530 were teachers, by April 1965. Of the 530 teachers, almost three-quarters are in general secondary schools, 15 per cent in teacher training, 9 per cent in universities, and 3 per cent in technical education. By 1964/65, all the regions had set a ceiling on the number of Peace Corps volunteers to be employed in their schools; 150 in the East, 150 in the North, 100 in the West, 100 in the Mid-West, and twenty in Lagos. As all these ceilings have now been reached, no further expansion in the number of these teaching volunteers should be expected in the future (with two exceptions, which will be mentioned later).

The United Kingdom VSO scheme started in Nigeria in 1963 and comprises two categories of volunteers: university graduates and so-called 'cadets', i.e. secondary-school leavers willing to serve for one year in a developing country before entering university. The salary of the graduates is practically the same as the starting salary of a Nigerian graduate—around £700. The Peace Corps volunteer receives only £540 to £660 from the United States Government but, as his terminal allowance is slightly higher than that of the VSO, the financial conditions are similar for both groups. The cadets receive board and lodging and about £2 in pocket money a week. In the spring of 1965, there were 109 VSOs teaching in Nigeria—eighty-one graduates and twenty-eight cadets. Of the former, nineteen were in the West, twenty in the East, twenty-one in the North, and twenty-one in the Mid-West and the federal territory of Lagos. Nigerians believe that only the graduates are really important and that the cadets cannot be considered even as temporary replacements for qualified teachers, except perhaps as technical teachers if they have the appropriate qualifications acquired by employment or apprenticeship.

In terms of teaching staff, the VSOs represent, from the United Kingdom point of view, only a supplement to the main United Kingdom effort, which is the 'Teachers for Nigeria' scheme. The Peace Corps, on the other hand, constitutes the main United States effort. This explains why the number of United Kingdom volunteers is much smaller than that of their United States counterparts.

The CUSO scheme is run by Canadian universities with the financial support of the Canadian Government. The Canadian volunteers are found mainly in the

Eastern Region, where nineteen of the twenty-five teaching volunteers were working in May 1965.

The advantages and disadvantages of these volunteer schemes, as seen by both Nigerians and expatriates, can be summed up as follows: Some 75 per cent of the volunteers work in the bush and this is undoubtedly a great advantage. Another important advantage is that the cost to Nigeria of the volunteer schemes is small; in the case of the United States Peace Corps teacher it amounts to £150 to £250 a year, covering the housing and local transport of the volunteer; in the case of the United Kingdom and Canadian volunteer, it amounts to £900 a year. The United States Government spends on each Peace Corps volunteer an average of \$8,000 to \$8,500, i.e., some £3,000 a year (including the central administration of the scheme), the Canadian Government about £1,100 on each CUSO volunteer, and the United Kingdom Government some £900 a year on the VSO.¹ Lastly, there is the personal dedication of the volunteer teacher on which all those concerned agree almost unanimously.

As for the disadvantages, the Nigerians consider that a service duration of two years, as in the case of United States and Canadian volunteers, is an absolute minimum, and that the one-year service of the VSOs is definitely too short; for, during the greater part of the first year, the volunteer has to adjust himself to a new social and educational environment and can hardly be fully effective. On the other hand, a service duration of three or more years is out of the question as it would drastically reduce the number of candidates. In the United Kingdom, in particular, recruitment for more than one year is very difficult, although in practice some of the volunteers later extend their contracts by one term or even one year.

Another major handicap is seen in the fact that the volunteer has only rarely had any practical teaching experience. Unfortunately, it has proved very difficult if not impossible to recruit experienced teachers as volunteers in any significant numbers; this is probably the price to be paid for any volunteer scheme.

Lastly, it is pointed out that many of the volunteers were brought up in an educational system which is completely different from that prevailing in Nigeria, and that this, combined with their lack of practical teaching experience, greatly lessens their effectiveness. It would follow that the British volunteer, to whom the Nigerian educational system is not entirely foreign, would be less handicapped than his United States or Canadian counterpart—which would at least partly compensate for the drawbacks due to his shorter period of service. But those who favour the introduction into the Nigerian educational system of as many non-traditional features as possible would welcome the new approaches introduced, consciously or not, by non-United Kingdom volunteers.

1. Adrian Moyes, *Volunteers in Development*, Overseas Development Institute, London, 1966.

The most important problem with regard to volunteer teachers is how to use them most effectively. A few years ago, the lack of qualified Nigerians in all branches was such that expatriate teachers could be used for almost any subject. But now that Nigerian graduates are becoming more numerous, especially in the arts, this is no longer the case; selection has become necessary. Most of the regional governments have already made their policy clear on this point: the volunteer organizations have been asked to supply from now on mainly, if not exclusively, graduates in mathematics, science and modern languages. With regard to the latter, an important evolution seems to be taking place, especially in the Eastern Region where eighty additional Peace Corps volunteers, over and above the ceiling of 150, are scheduled to be placed in 1966 in teacher-training colleges to strengthen the teaching of English as second language. The volunteers will receive special training for this purpose. If the scheme is put into operation, it will mean that the Peace Corps is moving for the first time into primary education. A similar project is under consideration for the Mid-Western Region; 100 volunteers over and above the ceiling would teach primary teachers manual arts, science and mathematics. On the other hand, it is also intended to make less use of volunteers in universities.

In all cases the future seems to lie in a more selective policy, i.e., in utilization of volunteers in strategic sectors of education where the scarcity of local resources is highest. This means a certain professionalization of the volunteer schemes, a professionalization which has its limits because most volunteers who are attracted come straight from college or university, but which certainly implies more emphasis on specialized pre-service training.

Teachers tied to specific projects

Specific aid projects are another important source of expatriate teacher supply. Table 5 gives the list of the projects and the number of teachers supplied under each of them. The 186 teachers are distributed as follows between the various levels and types of education: seventy-three (39 per cent) in universities, sixty-eight (37 per cent) in teacher training, twenty-one (11 per cent) in technical and vocational education and twenty-four (13 per cent) in comprehensive secondary schools. Clearly, these specific aid projects favour universities and teacher training and much less technical and vocational education, although it should be remembered that comprehensive secondary schools are to some extent establishments of technical education, so that the number of expatriates in technical and vocational education is slightly higher than twenty-one. The number of expatriates in teacher training increased still further in 1965, when twenty-two Americans were assigned to six teacher-training colleges in the Northern Region.

TABLE 5. Expatriate teachers tied to specific foreign aid projects, September 1964

Region	Institution and scheme	Agency	Teachers
<i>Eastern Region</i>	Owerri Advanced Teacher-Training College	Unesco	13
	Manual Arts Training	US-AID	2
	Port Harcourt Comprehensive School	US-AID	5
<i>Northern Region</i>	Kano Teacher-Training College	US-AID	7
	Zaria Teacher-Training College	Unesco	10
<i>Western Region</i>	Aiyetoro Secondary School	US-AID	6
	Ibadan Technical College	US-AID	7
	Olufioyo College of Education	US-AID	15
	Ondo Advanced Teacher-Training College	Unesco	10
<i>Federal</i>	Advanced Teacher-Training College	Unesco	13
		US-AID	13
	Technical Teacher Training	ILO	12
<i>Universities</i>	Ahmadu Bello	US-AID	6
	Ibadan	Various	20
	Lagos	US-AID	3
		Canada	1
		Unesco	3
	University of Nigeria, Nsukka	US-AID	30
		Various	10
	Total		186

SOURCE

Unpublished data in the files of the Bureau for External Aid for Education

In view of the comparative lack of technical education in Nigeria, it may be asked whether more expatriate teachers should not be assigned to it by the specific aid projects. In fact, the planned technical teacher-training college, to be financed and staffed by the United Nations Development Programme and some other organizations, is intended to fill this gap.

The problems raised by specific aid projects will be discussed more fully later in this study. But it should be stressed here that by far the most important factor in determining the success or failure of these specific projects is the quality of the teachers supplied, their status and their responsibilities.

Technical assistance schemes

Some of the major donors operating in Nigeria, in particular the United Kingdom Government, supply most of their teachers, not for specific projects, but for general use. The teacher is naturally tied to a specific institution, but the link is an individual one, and the scheme covers a number of institutions. The most

important of these arrangements is the United Kingdom 'Teachers for Nigeria' scheme, which started in 1965.¹

This scheme is, in fact, an extension of the so-called Key Post scheme, launched in 1961, and under which some ten teachers in key positions were receiving, by 1964, an annual inducement allowance of £500 from the United Kingdom Government. It is also a counterpart of the Overseas Service Aid scheme, inaugurated in 1961 for the benefit of United Kingdom colonies and newly independent Commonwealth countries, which Nigeria did not accept at that time. The major objective of the United Kingdom 'Teachers for Nigeria' scheme is to attract United Kingdom teachers to Nigeria and to persuade those already on the spot to remain for a longer period by making the financial conditions of their service more attractive. Tax-free allowances of £300 to £800 a year are paid to all those who qualify for the posts, and the United Kingdom Government expects to provide in this way, at a total cost of £1 million during a five-year period, seventy-five new teachers a year and to top up the salaries of some 250 teachers already working in the country and willing to remain for three more years. All beneficiaries must be graduates or technical teachers, but in exceptional cases non-graduates can also be considered. Originally, only non-university teachers were eligible, but, late in 1965, a separate scheme was introduced by which all the 350 United Kingdom teachers in Nigerian universities receive in the United Kingdom a 20 per cent increment of their normal salary.

One of the fundamental reasons for introducing the 'Teachers for Nigeria' scheme was a net decrease in the attractiveness of teachers' salaries in Nigeria. More and more United Kingdom teachers were inclined not to renew their contracts. The problem was felt especially in the North where negotiations between the regional government and United Kingdom authorities have been taking place for quite a long time. In that region, besides the topping up of salaries, an arrangement has been concluded with the Greater London Council according to which United Kingdom teachers going to Northern Nigeria do not break their link with the United Kingdom school administration and have security with regard to their re-employment after they return home. For reasons which will be given later, the scheme was more difficult to introduce in the West and in the East where, in May 1965, only about forty United Kingdom teachers altogether were confirmed as beneficiaries, as against 119 in the North. The introduction of the 'Teachers for Nigeria' scheme has prevented, in the North in any case, a sudden departure of a large number of expatriate teachers which, undoubtedly, would have created a critical situation.

Strictly speaking, the United Kingdom 'Teachers for Nigeria' scheme does not come within the ambit of technical assistance. The latter is usually of a more

1. As this scheme started operating only in 1965, its cost is not included in the figures of aid shown in Table 1.

limited nature and consists in putting at the disposal of the recipient country experts and teachers paid entirely by the donor. Two of the most important technical assistance schemes in the educational field are the United Nations Expanded Programme of Technical Assistance (EPTA),¹ and the programme of Canadian Technical Assistance.

Of the seventy-one experts who were working in Nigeria, in 1965, under EPTA, some twenty were teachers or experts directly involved in education. This is not a large proportion, but it should be remembered that some 75 per cent of those sent to Nigeria under different Special Fund projects work in education (all the Unesco and ILO teachers represented in Table 5). As for Canadian Technical Assistance, it provided, in 1964/65, forty-four secondary-school teachers, eighteen of them for teacher-training institutions, and five university teachers. In general, the Canadian teacher is lent by his institution to the Canadian Government (which puts him at the disposal of the recipient country) and keeps all the rights and advantages of his position. His salary, paid entirely by Canada, corresponds to his last salary at home, to which are added the increment of his next advancement, an overseas allowance representing about one-third of his basic salary, and, once a year, a travel allowance to Europe. This system is in many ways similar to that applying to teachers sent to Africa by France.

Problems raised by the employment of expatriate teachers

Among the problems raised by expatriate teachers, the most important are their recruitment and working conditions, on the one hand, and their effective utilization, on the other. Until recently, Nigeria did not encounter major difficulties in recruiting expatriate teachers, except for certain types of education suffering from severe teacher shortage. The conditions of employment offered to expatriates recruited and financed by Nigeria were apparently good enough to attract candidates; and external aid in the field of teacher supply was expanding rapidly between 1960 and 1964.

The employment conditions of Nigerian teachers vary from region to region. But, on average, the graduate secondary-school teacher, Nigerian or expatriate, receives a basic salary of £720 to £1,584 per annum which, with the rather low income tax of Nigeria, compares favourably with salaries prevailing in western Europe, let alone in India and Pakistan, the two Asian countries supplying a relatively large number of teachers to Nigeria. Salaries of university staff are, of course, higher, but they may compare less favourably with the corresponding

1. On 1 January 1966, EPTA and the Special Fund became the 'United Nations Development Programme'.

salaries in some of the developed countries; a full professor receives a basic salary of £3,000 in Nigeria, as against £3,600 to £4,500 in the United Kingdom. In addition to their basic salary, all expatriate teachers receive, of course, various special allowances, which may, in the case of starting teachers, almost double the expatriate's emoluments as compared with those of his Nigerian counterpart. In some of the higher posts, however, the difference might be only 10 to 20 per cent.

Another factor which largely contributed to ensure the inflow of expatriates was an efficient recruitment procedure, carried out mainly by the Nigerian High Commission in London—more exactly, the agents-general of the four regions—for the recruitment of secondary-school teachers; and by the United Kingdom Inter-University Council for Higher Education Overseas for the recruitment of university teachers. Again, until one or two years ago, the Inter-University Council had no great difficulties in finding suitable candidates, except for certain technological departments, such as electronics, where the salaries were not attractive enough owing to the competition of industrial firms. In 1963, for example, there were 3,408 applications for 690 vacancies, and the council recommended 477 applicants for appointment.

But, as already pointed out earlier, this rather favourable situation began to deteriorate in 1964. Owing to a rapid rise in the cost of living in Nigeria and a simultaneous increase in teachers' salaries in Europe, prevailing Nigerian salaries became insufficient to attract the necessary number of foreign teachers. On the other hand, it is certainly difficult to raise teachers' salaries in Nigeria since, compared with average earnings of Nigerians, these salaries are already extremely high—as they are in most African countries—and constitute a very heavy burden on the economy. It would seem, therefore, that an increasing number of expatriate teachers will have to be channelled through the various external aid schemes described above.

The second important problem is that of the effective utilization of expatriate teachers. What has been said about volunteer teachers applies to expatriate teachers in general and the first question to answer is, 'What are the levels of education, types of education and subjects for which expatriate teachers are most needed?' According to the great majority of Nigerians and external aid agencies, these are secondary and higher education, and within the former the priority subjects being mathematics, science and French, teacher training and technical education. But, in some respects, this may be an oversimplification of the problem; primary education, though it cannot count on the supply of expatriate teachers, can certainly benefit from them via the teacher-training institutions. The Northern Nigeria Teacher Education Project¹ and the utilization of eighty new Peace Corps volunteers in the teacher-training colleges of the East² are definite moves

1. See page 279.

2. See page 257.

in this direction. Similarly, the persistent demand for reforms and innovations in the primary-school curriculum might make the presence of foreign experts in this field a top priority.

Much depends also on the actual stage of development of the educational system. In the North, for instance, the priority for science, mathematics and French may not be as urgent as in the South. Also, in certain other small but important sectors, expatriates may still be necessary for the next few years, until the supply of nationals catches up with the demand. This is the case in physical education, especially in girls' schools, accounting, home economics and for certain other subjects.

An equally important problem of the effectual utilization of expatriates is the transient nature of the teaching staff in Nigerian schools. This indeed constitutes one of the major difficulties principals and administrators have to cope with. Strangely enough, the instability of the teaching staff concerns Nigerians and expatriates alike, although for different reasons. But, in the case of expatriates, the basic causes of this instability—the short duration of volunteer service or of contract appointments—cannot be expected to change. There are enough people in the developed countries willing, for financial or other reasons, to work for a few years as teachers in a developing country; but very few are willing to spend more than a few years. Moreover, understandably, the Nigerians themselves, eager as they are to africanize their teaching staff as soon as possible, do not wish to grant long-term contracts to expatriates. Thus, the transient nature of the expatriate teachers is inherent in the present situation.

Another difficulty connected with the recruitment of expatriate teachers is of a purely physical nature: provision of adequate housing for expatriates and of educational facilities for their children. Overcoming this difficulty often implies a considerable financial burden for the Nigerian authorities as well as a long delay endangering a regular supply of foreign teachers.

Expatriate teachers and government policies

In a country where expatriate teachers are a historical phenomenon, it is not easy to direct their flow in accordance with educational planning. Considering this basic difficulty, the results achieved in Nigeria are far from negligible.

In principle, the appointment or extension of contract of any expatriate non-university teacher must be approved by the regional ministry of education, and this rule applies to volunteers and teachers supplied under the various external aid schemes as well as to those who are hired under contract by Nigeria. In all circumstances, the Nigerians have to agree to any particular assignment, even if candidates for teachers under external aid schemes are usually chosen by the respective aid agencies.

Whether, in practice, all the new assignments and extensions of contract correspond to the requirement that expatriates should only be employed when and where Nigerians are not available, is another question. The rather complex relationship between state and voluntary agency schools is undoubtedly one of the main reasons why often a less than optimal use is made of expatriates. Voluntary agencies, for example, have often been criticized for preferring foreign teachers to Nigerians only because they did not have to pay them. On the other hand, considerations of status and economic factors have sometimes restricted the entry of qualified Nigerians into the teaching profession; as a result, schools and ministries of education had no option but to employ expatriates.

The policy towards foreign teachers varies according to the regions. In the past the North has generally preferred expatriates to Nigerian teachers from other regions. This, and the special arrangement it has with the Greater London Council, largely account for the high proportion of expatriates on the teaching staff of the Northern Region—95 per cent of all graduate teachers. Apart from the ceiling on Peace Corps volunteers, there are no limitations on the employment of expatriate teachers in the North.

The Western Region is at the other end of the scale; here the proportion of expatriates in the total of graduate secondary-school teachers was 49 per cent in 1964 and is expected to decrease rapidly. Since 1964, the authorities have been very reluctant to agree to any expansion in the in-flow of expatriate teachers, probably not so much for any political reasons, but because many officials have foreseen that the output of qualified nationals will meet the demand, except in a few specific sectors, very soon.

This is no vain speculation, since enrolment in the five Nigerian universities increased from 3,128 in 1961/62 to 6,655 in 1964/65, and the output of graduates, including those from abroad, was expected to be of the order of 2,500 in 1965. Also, the five advanced teacher-training colleges (ATTC) should supply annually 200 to 300 staff (more than 100 in the West alone) qualified to teach in junior secondary schools. Out of a total of 2,466 secondary-school teachers in the West in 1964, excluding secondary-modern-school teachers, there were 490 Nigerian graduates and 470 expatriate graduates. Assuming that two-thirds of all graduate teachers should be Nigerian, a figure accepted as a target by the Western ministry of education, that 50 per cent of all secondary teachers should be graduates, a target which has not yet been accepted but is under consideration, and that there should be no expatriates among the non-graduates, the present number of expatriates would be very near the ceiling and the present number of secondary schools in the Western Region would require some 340 additional Nigerian graduates. This does not seem to be a high figure in view of the expected number of university graduates, not even if it were to increase by 10 or 20 per cent in the next two years owing to the expansion of secondary education and to retirements.

The authorities may, therefore, be justified in their anticipations, although it must be admitted that the whole calculation is open to a good deal of uncertainty. Nobody is able to say how many of the new graduates and ATTC leavers will enter—and remain in—the teaching profession. In fact, principals of almost every secondary school are still looking desperately for qualified teachers, whether Nigerian or expatriate. On the other hand, Nigerian graduates in subjects for which the principal outlet is teaching, e.g., history and geography, seem already to be numerous enough to fill all the vacancies.

In order to forecast the requirements for expatriate teachers, the planner must be able to forecast the supply of local teachers, and this supply is dependent not only on the output of the universities and teacher-training institutions, but also on the propensity of the graduates and ATTC leavers to enter and remain in the teaching profession. Unless the Nigerian planner can estimate all these variables with a fair degree of reliability, he cannot make good projections relating to the needs for expatriate teachers. Yet the donor must know well in advance how many teachers, of what kind and when, are necessary. Nigerian educational planning has reached the stage where the types of foreign teachers needed are more or less established, but so far no real long-term estimates have been made either of the numbers needed or of the timing of the foreign teacher supply; only year-to-year evaluations were available since 1961. An exception is the Northern Region. The latter prepared estimates for the post-primary levels in connexion with the 1962/68 development plan and presented them to a joint meeting of the various aid agencies in 1963. The result of this meeting was the 'Wisconsin Project' and the link with the Greater London Council combined with the United Kingdom 'Teachers for Nigeria' scheme.

3 Studies abroad

According to statistics published by the British Council, Nigeria is the country which has by far the largest number of students in the United Kingdom. India, which is second on the list, has less than half the Nigerian number. In the United States of America, there are more students from Nigeria than from any other African country with the exception of the United Arab Republic, almost as many as from Mexico and more than from Venezuela, the two largest contingents from Latin America.

Although Nigerian authorities and several institutions established *ad hoc* have been collecting data on Nigerians studying abroad for some years now, no reliable over-all figures have yet been published. Some approximate evaluations can, however, be made by combining and comparing the fragmentary information available. The result of these evaluations is shown in Tables 6 to 9 (pp. 267ff). In many respects, the information contained in them is unsatisfactory and sometimes even contradictory. Thus, according to Table 6, only 393 Nigerians were expected to finish their courses in technical and vocational schools of all kinds in 1965; but, according to Table 7, more than 5,000, and probably more than 6,000 if those not registered with Nigerian authorities in London are considered, have been studying in such schools in Europe—which would imply a minimum yearly output of 1,500 to 2,000. Also, the number of Western and Eastern Nigerian students in the United Kingdom is estimated at more than 10,000, while the British Council figures indicate a total of 8,630 from Nigeria as a whole.

Such discrepancies and contradictions obviously result from lack of information, in the host countries as well as in Nigeria. The most reliable figures seem to be those emanating from the United States of America; the least reliable, those collected in continental Europe. The regional directories for Eastern and Western Nigeria list only 159 Nigerians studying outside the United Kingdom; yet, about 100 Nigerians were sent in 1964 on official scholarships to the Federal Republic of Germany alone, and semi-official estimates put the number of Nigerians studying or being trained there at 1,900.

Another difficulty arises from the unclear distinction between those who are in formal education and those who pursue professional or practical training. The latter, because they often combine their practical training with part-time study at a university or technical college, may often be classified either under professional training or under formal education.

An over-all figure of Nigerians studying abroad can, therefore, represent only a very rough approximation. From Tables 6 to 9 and from other information collected both in Nigeria and in the host countries, the following tentative figures can be advanced (for 1963/64):

Nigerians studying and being trained in the United Kingdom	11 000-12 000
Nigerian students in the U.S.A.	1 200
Nigerian students in Western Europe, United Kingdom excluded	1 000-2 000
Nigerian students in the U.S.S.R. and Eastern Europe	500-1 000
Nigerian students in other countries	500-1 000
Total	14 200-17 200

Because of its very tentative nature, this estimate cannot be of great help to the educational or manpower planner. But it has at least the merit of situating the problem, especially when it is set against the total enrolments in higher secondary, post-secondary and university education in Nigeria. These are as follows:¹

Nigerian universities	5 418
Advanced teacher training	752
Technical institutes and colleges	3 017
Secondary commercial (senior years only)	2 083
Total	11 270

As can be seen from these two totals, the reservoir of future high-level and middle-level manpower represented by Nigerians studying abroad is, theoretically at least, between 30 and 60 per cent greater than that represented by those studying in equivalent Nigerian institutions.

There are also some further conclusions which can be drawn from the tables and from other available information.

1. With the exception of the United States of America, only a relatively small proportion of Nigerian students abroad study at universities—about 10 to 15 per cent in the United Kingdom and probably not more than 20 per cent over-all; the remainder are in higher secondary or post-secondary education or in professional training. This means that the number of Nigerians in foreign universities amounts to about 2,000, less than half the enrolment at Nigerian universities in 1964/65 and below the average for Africa south of the Sahara, where the number of university students abroad and at home is roughly the

1. All figures are for 1963/64 and are taken from *Statistics of Education in Nigeria in 1963*.

same. On the other hand, the number in non-university education abroad is 11,000-14,000, as against 6,000 in Nigeria.

2. The distribution by branch of study shows marked differences between the subjects studied by Nigerians in various host countries. In the United States of America, engineering, natural sciences and social sciences are the main field, while in the United Kingdom, law and medicine have by far the greatest number of students. This is due to the fact that most Nigerian students in the United States of America are on scholarships, which are awarded mainly in natural-science subjects and engineering; medical and law studies in the United Kingdom, on the other hand, represent the continuation of a trend started before it was possible to study these two subjects in Nigeria. In technical and vocational education, one-half to two-thirds of the enrolments are for commercial subjects, such as accountancy, secretarial courses, etc.; large numbers are in nursing, and very few in teacher training.
3. The great majority of Nigerians at universities abroad—75 per cent in the United Kingdom and 72 per cent in the United States—are undergraduates.

TABLE 6. Number of Nigerian students expected to complete courses in 1965 in Nigeria and abroad

	Total	In Nigeria	Total abroad	In the rest of Africa	In the U.K. and Ireland	In the rest of Europe	In the United States	In the rest of the world
Universities								
Medicine	221	103	118	—	62	21	8	27
Natural sciences	242	166	76	13	36	2	20	5
Agriculture	116	77	39	1	1	1	35	1
Social sciences	435	333	102	34	44	8	13	3
Arts	371	271	100	18	33	4	24	21
Education	159	131	28	—	12	—	14	2
Law	229	189	40	—	40	—	—	—
Engineering	128	51	77	8	17	6	44	2
Total	1 901	1 321	580	74	245	42	158	61
Technical and vocational schools								
Technical courses	167	1	166	—	156	—	7	3
Medical courses	5	—	5	—	5	—	—	—
Non-technical courses	221	10	211	5	197	2	3	4
Total	393	11	382	5	358	2	10	7
Teacher training	2	—	2	—	2	—	—	—
Nursing	16	—	16	—	16	—	—	—
Trade and applied courses	4	—	4	—	—	—	4	—
Grand total	2 316	1 332	984	79	621	44	172	68

SOURCE Federal Ministry of Education, *National Register of Students, 1965 Potential Graduates*, Lagos, 1965

The integration of external assistance with educational planning in Nigeria

TABLE 7. Number of Nigerian students enrolled in the United Kingdom and other countries of Europe, 1963/64

Institutions and courses	Western Nigerian students ¹		Eastern Nigerian students ²	
	Number	Percentage	Number	Percentage
University				
Medicine	91	20.1	174	27.5
Natural sciences	15	3.5	15	2.4
Agriculture	23	5.3	7	1.1
Social sciences	47	10.7	54	8.5
Arts	28	6.4	33	5.2
Education	28	6.4	43	6.8
Law	190	43.2	290	45.5
Engineering	19	4.4	19	3.0
Total	441	100.0	635	100.0
Technical and vocational schools				
Technical courses	1 173	33.4	430	28.7
Medical courses	261	7.5	149	9.9
Non-technical courses	2 087	59.1	919	61.4
Total	3 521	100.0	1 498	100.0
Teacher training	112		64	
Nursing	508		458	
Trade and applied courses	1		22	
Course of study unknown	90		170	
Grand total	4 673		2 847	

SOURCES

1. Office of the Agent-General for Western Nigeria, *Directory of Western Nigerian Students in the United Kingdom and the Continent of Europe, London, 1964*. This document and the figures shown above cover only students registered with the office. The number of those not registered is unknown. The total number of Western Nigerians in Europe has been unofficially estimated at 5,000 to 6,000.
2. Office of the Agent-General for Eastern Nigeria, *Directory of Eastern Nigerian Students in the United Kingdom, the Republic of Ireland and the Continent of Europe as at the beginning of September 1964*. This document and the figures shown above cover only students registered with the office. They are estimated to represent some 60 per cent of the total number of Eastern Nigerian students in Europe.

TABLE 8. Nigerian students in the United Kingdom, 1963/64

Institutions or courses ¹	Number of students		Subjects	Number of students	
		%			%
Universities	1 022	11.8	Universities ²		
Technical colleges	2 959	34.3	Humanities	197	19.3
Inns of Court	573	6.6	Social sciences	289	28.3
Teacher training	135	1.6	Engineering	138	13.5
Nursing training	1 260	14.6	Medical sciences	192	18.8
Professional and practical training	1 657	19.2	Natural sciences	135	13.2
Private colleges and others	1 024	11.9	Agriculture	71	6.9
Total	8 630	100.0	Total	1 022	100.0

SOURCES

1. British Council, *Overseas Students in Britain, 1964*
2. The Association of Commonwealth Universities, *Students from Other Countries in United Kingdom Universities 1963/64*

TABLE 9. Nigerian students in the United States of America, 1963/64

Subject	Number of students	%	Subject	Number of students	%
Humanities	109	9.6	Medical sciences	105	9.2
Social sciences	261	22.9	Natural sciences	190	16.6
Business administration	67	5.9	Agriculture	79	6.9
Education	76	6.7	Others	17	1.5
Engineering	236	20.7			
			Total	1 140	100.0

SOURCE: Institute of International Education, *Open Doors*, New York, 1964

Studies abroad and priority needs

These conclusions are not very consistent with the principle that studies abroad should be pursued only in fields for which there are no facilities in Nigeria and which enjoy a priority in the context of economic and social planning; and that such studies should be pursued at the highest possible level. Most Nigerians abroad study subjects for which local facilities are available, subjects, moreover, which do not enjoy priority; and only a small proportion study at the post-graduate level. The most important factor of this situation is the large proportion of students abroad who are self-supporting. Exact figures are not known because the registration of Nigerians abroad is very deficient (especially in respect of private students), but it is significant that even in the field of university studies, which get most of the scholarships, 40 per cent of the students in the United Kingdom and about 20 per cent in the United States are self-supporting.

Every year some 800 new scholarships are awarded to Nigerian students, 500 foreign and 300 Nigerian. Assuming that most of them are extended by two to four years, the number of official scholarship holders would amount to not more than 3,000 out of a total of 14,000–17,000 studying abroad. This does not mean that the remaining 11,000–14,000 are 100 per cent self-supporting; many of them receive at least partial support from various private organizations, but this support cannot be used as a policy instrument to attain the objectives sought by the Nigerian Government.

The large number of Nigerians studying abroad reflects of course a historical trend which in itself is a positive one: a widespread desire for education accompanied by a willingness to undertake it even at the cost of great personal sacrifice. The difficulty arises from the fact that this trend at present exists in a context in which studies abroad have only a complementary function (important as it may be) as against the past when schools abroad were the main if not the only 'producers of the country's élite.

Many Nigerians tend to go abroad because for a long time only studies abroad provided the diploma necessary to practise in all the better-paid professions and to gain the prestige which local education did not and could not give. This, fortunately, is no longer the case. Yet many Nigerian students continue to go to foreign schools although a number of them are without great standing, completely unknown in the academic and professional world, and although Nigeria already possesses equivalents or even better than equivalents.

Another reason contributing to the flow of Nigerians abroad often lies in the fact that top Nigerian institutions, because of lack of space and/or because of their regard for high standards, set entrance requirements which many Nigerians cannot meet. Instead of waiting for another year, they find it easier to enter foreign institutions whose entrance requirements are less exacting. Sometimes even the financing of studies abroad may appear, from the point of view of the individual student, less difficult than it would be in Nigeria, owing to various possibilities of support once he is abroad, and also to opportunities of earning through part-time work, particularly in the United Kingdom.

In fact, the cost of studies abroad is very high, if all those who bear it are considered. The average annual cost of a university student sent to Canada is \$4,000 and to the Federal Republic of Germany \$2,000—that is, the cost to the respective governments. Scholarships provided by the governments of the regions represent an expenditure, including travel expenses and fees, of \$2,800 (£1,000) per year in the United States and \$2,200 (£800) in the United Kingdom. Thus, the average cost of studies abroad amounts to £700 to £1,000 per student per year. As the unit cost in some Nigerian universities may often amount to £2,000 (Ahmadu Bello University), it is sometimes asserted that studies abroad are even cheaper for the country than studies at home. The conclusion is obviously a wrong one, for the cost of an additional student is determined not by the average unit cost, but by the marginal unit cost. The latter is much lower than the former and may sometimes even be negligible owing to the fact that enrolments in many of the Nigerian institutions of higher education are very low, with a student/teacher ratio of between 5.4 and 7.1. Also, not all the Nigerian universities have such high unit costs; the University of Ibadan, for instance, has a unit cost of £920, and of only £750 if the medical school is excluded. Lastly, scholarships awarded by the authorities and tenable in Nigeria amount to £160 to £250 a year only. The marginal unit cost of studies in Nigeria will often be not much higher than this last figure.

There is no evidence that a large number of Nigerians, after having terminated their studies, stay permanently abroad. Over-all, very little information exists on this point. Neither the Nigerian authorities nor the host countries have a means of checking whether and when a Nigerian student stays or returns home. But the general impression prevails on both sides that only for very few is emigration for

studies abroad eventually transformed into a permanent emigration. What on the contrary seems to happen quite often is that the originally foreseen duration of the stay abroad is considerably extended. Again, no real statistical evidence can be advanced, but available information points in this direction. The National Manpower Board, for example, estimates that in the near future about 1,300 Nigerians will be returning from overseas annually. This is a very low figure if related to the number of Nigerians studying abroad. Even if it omits a great many of the private students who escape any registering, it would imply that the majority of students stay over five years. Table 6 shows that, according to the data of the National Register of Students, 580 university students are expected to return in 1965. If this figure is related to the estimated 3,000 Nigerians in universities abroad, a similar conclusion can be reached.¹

There are probably several reasons why students have to extend their stay beyond the average of three years. Some are unable to pass their final examinations in the prescribed time, others decide to continue their studies at the postgraduate level, others still who had an inadequate qualification lose time in preparing for entrance examinations.

Lastly, it should be stressed that no information is available so far on the utilization of Nigerians returning home after having completed their studies abroad. Do they find employment easily? Do they enter professions for which they have been prepared? To what extent can they apply knowledge and skills acquired abroad?

Holders of government scholarships are subject to a bond system which, theoretically at least, guarantees that they will enter occupations for which they have been prepared and that they will work in the region which awarded the scholarship. In certain cases, donors, before awarding a scholarship, ask for a letter from the Nigerian Government stating that the holder will be employed in a particular job after his return home. Similarly, all Nigerians studying abroad under the various counterpart training schemes, such as the advanced teacher-training colleges run by Unesco, are bound to take up specific jobs after having completed their studies. But little is known about the real effectiveness of such bonding schemes. If the value of studies abroad is to be properly assessed, a great deal of statistical research will be needed to elucidate the many questions which, for the time being, remain unanswered.

1. An evaluation of the average duration of stay abroad based on the relation between the expected number of returns and the estimated number of Nigerians abroad is of course very approximate and hazardous, especially because the number of Nigerian students abroad in the past years is unknown. But it can safely be assumed that the flow has not increased since about 1962/63.

Studies abroad and educational planning

The foregoing considerations make it clear that the Nigerian authorities have had but limited power to control or influence the flow of Nigerians for study abroad in accordance with the development needs of the country. The exercise of such control and influence concerns, in fact, scholarship holders who account for about 20 per cent only of Nigerians studying abroad. But with regard to this fraction of 20 per cent, the integration with educational planning has been real and the channelling of the flow efficient. It is ensured by the Bureau for External Aid for Education and by the scholarship boards, one federal and one for each region, which are responsible for selecting and nominating the candidates. Tables 10, 11 and 12 illustrate the policy of these two bodies.

As can be seen, the distribution of scholarship holders by subject of study is very different from that of Nigerians in general studying abroad, as shown in Tables 6 to 8. The great majority of scholarship holders read subjects which

TABLE 10. Overseas scholarships awarded in 1963/64 to Eastern Nigerian students, by branch of study

	Number	Percentage
Engineering and technical courses	36	33
Agriculture and allied courses	35	32
Teacher training and education	27	25
Natural sciences and mathematics	6	5
Others	6	5
Total	110	100

SOURCE Unpublished data of the Eastern Region Scholarship Board

NOTE Most of the courses were highly specialized and not available in Nigeria

TABLE 11. Nominations for overseas scholarships by the Bureau for External Aid for Education, 1964

	Number	Percentage
Engineering and technical courses	173	30.4
Medicine and related subjects	103	18.1
Arts and education	83	14.6
Science and mathematics	75	13.2
Agriculture and allied subjects	68	11.9
Social sciences and related subjects	65	11.4
Commercial subjects	2	0.3
Others	1	0.1
Total	570	100.0

SOURCE Unpublished data of the Bureau for External Aid for Education

TABLE 12. Northern Nigerian Government scholars abroad, 1964/65

	Number	Percentage
Arts and education	93	23.1
Engineering and technical courses	88	21.7
Medicine and related subjects	43	10.6
Law	36	8.9
Business and commercial subjects	34	8.4
Agriculture and allied subjects	31	7.6
Mathematics and natural sciences	7	1.7
Social sciences	7	1.7
Others	66	16.3
Total	405	100.0

SOURCE Unpublished data of the Northern Regional Scholarship Board

correspond to the priority needs of the country. Moreover, the authorities are progressively diminishing the number of scholarships tenable abroad in favour of scholarships tenable in Nigeria. This is shown in Table 13, which indicates that there was a significant increase in the number of scholarships tenable in Nigeria and awarded by the Federal Government between 1962 and 1964, and a corresponding fall in the number of those tenable abroad.

This policy was clearly formulated by the National Universities Commission and endorsed officially by the Federal Government in the following statement:

'Being anxious that maximum use should be made of the financial resources available for higher education, the Commission recommended that, while making a proportion of scholarships tenable overseas, particularly for courses not available locally and for postgraduate study, all the governments of the federation should make the most of their undergraduate scholarships tenable in Nigerian universities in order to increase the number of scholarships available to Nigerians and in order that the income of the universities might be increased.'¹

TABLE 13. Number of Federal Government scholarship awards, 1962/64

Year of award	In Nigerian institutions	In overseas institutions	Total
1962	185	230	425
1963	290	205	535
1964	348	130	618

SOURCE Unpublished data of the Federal Scholarship Board

1. 'Decision of the Government of the Federal Republic of Nigeria on the Report of the National Universities Commission', Sessional Paper No. 4 of 1964.

Some of the donor agencies have observed this. Thus, in 1964/65, the official *Deutscher Akademischer Austauschdienst* (German Academic Exchange Service) of the Federal Republic of Germany awarded twenty-one scholarships to the universities of Ibadan and Nsukka at a cost of £250 to £300 per student, i.e., less than half the cost of a scholarship in the Federal Republic itself; the Rockefeller Foundation awarded medical training scholarships, and the US-AID technical college scholarships, all tenable in Nigerian institutions. In fact, all donors seem to have accepted more or less willingly the idea that studies abroad should be complementary to the development of Nigerian education and have agreed to co-operate with the national planning bodies in the selection of scholarship holders. All offers are now made to the Bureau for External Aid, which refers them to the scholarship boards of the regions for the selection of candidates, the regions and the territory of Lagos each receiving a fixed quota.¹ If any of the regions does not fully use its quota, the unused scholarships are put at the disposal of the other regions. The final choice of the candidate is made by the donor agency or the relevant educational establishment and approved by the competent Nigerian authorities, who are thus in a position to exercise full control over the policy pursued.

Sometimes such co-operation goes much further. Thus, under the African Scholarship Programme of American Universities (ASPAU), which was started in 1960 and has by now been extended to practically all Africa, four partners contribute to the financing of Nigerian students in the United States: the Nigerian Government pays for the transport of the student, the US-AID for his board and lodging in the United States, the United States universities cover the tuition fees, and private foundations finance the administration of the scheme and the selection process. The recruitment is done through the Bureau for External Aid and the scholarship boards. The candidates then undergo a written examination and those who pass it successfully are interviewed by a committee composed of six to eight Nigerian officials and two ASPAU representatives. The United States university then chooses the holders from among the candidates recommended by the committee. Since 1964, all scholarships have been awarded in accordance with the priorities set by the National Manpower Board.

As for self-supporting students, the only measures which the Nigerian authorities can take, and have taken, are those aimed at acquiring a better knowledge of their flow and location. This information is gathered by the scholarship boards on the regional level, by the National Register of Students at the federal level, and by the Nigerian embassies or high commissions abroad.

The scholarship boards or students' advisory committees, both operating within the ministries of education of the regions, advise students and, after appropriate

1. In 1964, the Eastern, Western and Northern Regions each received 30 per cent, the federal territory 10 per cent, of the scholarships offered.

inquiry, issue them with a certificate stating that their educational qualifications are adequate for the intended study abroad and that their financial backing is sufficient for this purpose. Educational institutions abroad have been requested to accept non-sponsored Nigerian students only on the presentation of such a certificate, and many, especially in the United Kingdom, are already enforcing this rule. This gives the Nigerian authorities some measure of control over the flow of non-sponsored students, though not over their choice of subjects of study.

The National Register of Students, created in 1963 within the Federal Ministry of Education, aims at recording all Nigerian students in post-secondary education, whether at home or abroad, with indications about the branch of study and the expected date of termination of studies. However, the questionnaires sent out to all Nigerian students in the first year encountered a very poor response, some 3,000 only having been answered. Subsequently, questionnaires were sent to all the institutions where Nigerians were expected to study, and the results proved much more satisfactory, answers being received from 242 institutions in twenty-four countries. An analysis of these answers was not available at the time of the present inquiry, spring 1965, but a preliminary document, thought to cover 80 per cent of Nigerian students abroad, was published, listing students expected to graduate in 1965. This document was sent to all major employers in Nigeria and was used as the source for Table 6 (page 267).

The role of the embassies, particularly of the High Commission in London, is twofold: they keep a register of students, and they can exercise a certain influence by refusing their assistance whenever a student does not conform to the terms of his scholarship. As most of the United Kingdom institutions now require from students a letter of recommendation from the High Commission, registers are likely to become more complete.

All these measures and, of course, the expansion of education in Nigeria itself, have had a certain effect in that the flow of students abroad seems to have reached a peak in 1962/63 and to be decreasing since then. The only available information which leads to such a conclusion is the data published by the British Council. These probably are on the low side, but they reflect the general trend, especially as Nigerian students in the United Kingdom represent 60 to 70 per cent of all Nigerian students abroad. The data are shown in Table 14.

The fact of course remains that in 1965 a very large proportion of Nigerian post-secondary students still follow courses abroad, too many of them in branches which do not correspond to priority sectors of Nigerian development and in establishments which are not of the required highest level. To reverse this trend will necessitate a great effort.

In the first place much remains to be done in the way of acquiring better knowledge about the flow of students abroad. Institutions created by Nigeria for this

TABLE 14. Nigerian students in the United Kingdom, 1960/65

Year	In universities	In all types of institutions
1959/60	883	6 000
1960/61	1 010	6 800
1961/62	1 124	7 836
1962/63	1 090	8 954
1963/64	1 022	8 630
1964/65	917	...

SOURCE: British Council, *Overseas Students in Britain, 1964*

purpose—in particular the National Register of Students—constitute a promising start. The sincere and active co-operation of all host countries is of course indispensable. This implies answering the questionnaires issued by the Nigerian authorities, implementing fully the condition that all Nigerian students, whether scholarship-holders or private, should register with their embassy, and/or be in possession of a recommendation from the competent scholarship board.

The second big task is closer integration of studies abroad with national manpower planning. It has been stated that, as far as scholarship holders were concerned, over-all priorities were respected. This, however, does not mean that a plan has been established defining the priority branches with sufficient precision and stating how many Nigerians should study abroad in each of them. Respecting over-all priorities or manpower requirements of the Nigerian economy does not mean much more (in 1965) than respecting a few general principles believed to be true either on the basis of documents such as the Ashby report or on the basis of prevailing opinions regarding the requirements of developing economies. They all reach the same general conclusion: the country needs, in the first place, more technicians, engineers, scientists, teachers, statisticians, mathematicians, etc. Students consequently obtain scholarships more easily in these fields than in others. Obviously, such an approach is far from sufficient, but a more appropriate one can hardly be implemented before manpower planning itself reaches a more advanced stage. On the other hand, it must be recognized that, up to 1965, it was very difficult for the Nigerian manpower planner to take due account of the output of universities and of other educational institutions abroad. He simply did not know enough about Nigerians studying overseas. This at least partly explains why this output has been taken into consideration in Nigerian manpower planning in vague terms only.

Finally, studies abroad should also be considered more closely from the point of view of the cost involved. The federal and regional governments spent £1.5 million on overseas scholarships in 1962/63, a total which represented 85 per cent of the recurrent expenditure of the University of Ibadan and 250 per cent

of that of the University of Nsukka. Foreign scholarships in 1962/63 amounted to £1 to £1.5 million and taking into account self-supporting students, the total cost of studies abroad may amount to over £10 million, a figure equal to some 40 per cent of the total public recurrent expenditure on education in Nigeria. Approximate as this figure may be, it gives a fair idea of the cost implication of studies abroad and of the importance of utilizing to the best possible advantage the resources thus extended.

4 Building up institutions

More than half the amount of external assistance to education in Nigeria is earmarked for the building up of specific educational institutions or services.

The major projects

In the field of *primary education*, there is, besides indirect assistance through the support of teacher-training colleges and of various general services such as educational broadcasting, only one major project—the aid provided by Unicef to certain primary schools in the Northern Region. Schools in provinces with an enrolment ratio lower than 14 per cent receive standardized parcels containing basic equipment, such as pencils, blackboards, chalk, and textbooks; at the same time, Unicef supports an expatriate adviser working in the Ministry of Education on the development of primary education. The cost of the project is £900,000, to be spent over five years. Unicef also provides assistance for the building of handicraft centres attached to primary schools in the Eastern Region.

In the field of *secondary education*, the most important projects in the past were the two comprehensive schools, at Aiyetoro in the Western Region and at Port Harcourt in the Eastern Region. The purpose was to demonstrate the feasibility of a multi-purpose school, i.e., a school with mixed grammar-school and technical-school programmes, as opposed to a single-purpose institution (grammar or technical). The curricula and syllabuses developed at these schools are supposed to serve as prototypes for other comprehensive schools to be created in the future. The two schools are assisted by the US-AID in personnel, equipment, fellowships and capital expenditure to a total value of £3.5 million for the period 1961 to 1972. With the exception of a loan of £643,000 for the expansion of physical facilities at the Port Harcourt school, all this aid takes the form of a grant.

Another project is that of the International Development Association (IDA)

which in 1965, granted an interest-free credit of £7.1 million, of which about 60 per cent is for the development and improvement of general secondary education, especially with regard to science and handicraft teaching. Ten to 15 per cent of this credit is destined for consultants' fees, and the remainder for school buildings, staff housing equipment. Lastly, mention should be made of an offer made by the United Kingdom Government in 1965 to provide £200-worth of science equipment to every secondary grammar school.

In the field of *teacher training*, a number of colleges have been created or assisted by external aid agencies. Among the earliest and most important programmes were the so-called Ashby courses. Since 1961, some seventy United Kingdom teachers have been provided by the United Kingdom Government to give in-service training and special courses to about 1,300 Nigerian teacher students every year during the summer vacation. Since 1962, the United Nations Special Fund,¹ operating through Unesco, has been financing four advanced teacher-training colleges (one in Lagos and one in each of the regions except the Mid-West), where both grade II teachers and secondary-school leavers take a three-year course combining academic training at an advanced, but pre-university, level with training in the methods and principles of education. The colleges are meant to produce teachers for lower secondary schools. They involve an assistance of £1.5 million, representing the salaries of expatriate staff, supply of equipment, and fellowships for counterparts over a period of six years, from 1962 to 1967. A fifth advanced college, the Ibadan College of Education, resulting from a merger of the Olunloyo College in Ibadan with the Ransome Kuti College, is supported by the US-AID, which also assists the United Nations and Ford Foundation-sponsored college in Lagos. In the case of the last two institutions, the United States aid is provided largely in the form of personnel through university contracts.

As far as primary-school teacher-training colleges are concerned, two major projects, both in the Northern Region, are benefiting from external aid: the Kano Teacher-Training College, backed by US-AID since 1964, and the Northern Nigeria Teacher Education Project ('Wisconsin Project') started at the end of 1964 and financed by the Ford Foundation. The former is part of a project aimed at developing one specific teacher-training college which would produce grade II teachers and, eventually, teachers for grade II teacher-training colleges, upgrade uncertified teachers and act as a centre for instructional materials for the Kano area. In the future, this college will also deliver the Nigerian Certificate of Education, which so far only advanced teacher-training colleges could award. The Teacher Education Project provides twenty-two teachers-advisers to seven teacher-training colleges with a view to improving curricula, teaching aids and methods,

1. 'United Nations Development Programme', as of 1 January 1966.

and the administration of primary education in the Northern Region in general.

In the field of *technical education*, external aid has played a relatively small part in the past. The Ibadan Technical College has been assisted since 1961 by US-AID by the supply of advisers, fellowships and demonstration materials. US-AID also supports twelve manual art centres in the Eastern Region training boys from senior primary classes with a view to making their education more functional. Technical education further benefits from a United Nations Development Programme—ILO project, the National Training Scheme for Instructors and Supervisors at Yaba, Lagos, which trains teachers for trade centres and vocational schools for the whole of Nigeria, as well as industrial foremen. This project, started in 1963, will cost the United Nations £360,000 over a period of four years, the main expense being the provision of twelve expatriate instructors.

Even more important for the training of technical teachers will be the National Technical Teacher Training College to be set up in Lagos with the help of the United Nations Development Programme as far as staffing is concerned, and with the support of the IDA credit for the construction of buildings. The IDA credit will also be used for other projects in the field of technical education: 32.2 per cent of its total amount (£7.1 million), i.e. £2.3 million, will finance the expansion or the creation of technical, vocational and trade schools all over Nigeria.

Lastly, higher technical institutions will benefit in the next few years from a United Kingdom grant of £5 million made in 1961 and of which a small part only had been used by 1965. Plans under discussion, or already approved, include the spending of £500,000 for the creation of a polytechnic at Kaduna in the North, £525,000 for a technical college at Auchi in the Mid-West, and £850,000 for a technical institute at Enugu in the East, all these funds to be spent on the construction of buildings.

As for the *universities*, all have benefited from external aid grants. The most important of these are the United States grant for the University of Nigeria at Nsukka and the United Kingdom grant of £5 million mentioned above, of which £2.1 million has been set aside for the development of the Ahmadu Bello University in the North and £575,000 for the University of Ife in the West, both on capital account. Another grant of £1.5 million had been made earlier by the United Kingdom Government to the University of Ibadan. There is also a five-year allocation of £310,000 made in 1962 by the United Nations Development Programme and FAO for the development of the Forestry Department of the University of Ibadan; a five-year grant of £450,000 made by the United Nations Development Programme and Unesco to the faculty of engineering of the University of Lagos; and a three-year grant of £265,000 made by the Netherlands Government to the faculty of engineering of the University of Nigeria. These three grants cover mainly the supply of expatriate teachers and of equipment.

Private organizations have also played an important role. The Ford Foundation

has so far spent a total of about £1.5 million on the University of Ibadan, providing staff housing, chairs in sociology, linguistics and archaeology, and buildings for various faculties. The Rockefeller Foundation is financing, among other things, the establishment of an institute of African studies at the University of Ibadan and a programme of producing improved cereals to be carried out at the Ahmadu Bello University.

The trends in external aid for the building up of institutions reflect the general development in external aid to education in Nigeria. Before independence, and in the years immediately following it, by far the greatest share of external aid went to the universities. This was the result, not so much of any well-defined educational planning doctrine,¹ as of traditional policies followed by the donors and also, perhaps, of the assumption that higher education, because of the existence of an academic world community, lent itself more easily to transfers of staff, methods, equipment and funds than any other level or type of education.

The external support of teacher training and secondary-grammar institutions did not start until 1962. It may be assumed that this was the result of the Ashby report as well as of the Addis Ababa conference and of the numerous writings in the field of economics of education stressing the importance of secondary education and teacher training for the developing countries. It was at this stage that the United Nations and its specialized agencies as well as the US-AID turned their attention to advanced teacher-training colleges and certain types of secondary schools. Finally, from 1964 on, technical and vocational training institutions began to attract the attention of external aid agencies; the IDA credit and the United Kingdom grants are significant for this latest development.

It is against this historical background that certain practical problems arising in connexion with the building up of institutions should be examined.

Capital expenditure and supply of educational equipment

External aid for capital expenditure would seem at first sight to raise few complications. This is certainly not so. Firstly, all such grants and loans require a preliminary—often difficult—agreement between the donor and the Nigerian authorities with regard to the content and location of the project to be financed. Furthermore, donors will make the disbursements only on certain conditions, such as the approval of detailed construction plans and a participation of local funds in carrying out the project. The fact that more than four-fifths of the United

1. It should be noted, however, that the Ashby report, published in 1960, stressed the importance of external aid to both universities and secondary schools.

Kingdom grant for higher education remained unspent between 1961 and 1964 clearly shows the difficulties that may arise even in the spending of external aid already granted.

Another delicate problem arises when the aid agency stipulates that all the supplies for which the grant or loan is to be used must be bought from the donor country. The disadvantages of such tied aid, whether for education or any other purpose, are obvious. It has a particular impact on the final cost of external aid to the recipient, especially if aid has been provided under the form of a loan (because, possibly, much higher prices must be paid for the supplied items in the country of the donor than in the local or in other foreign markets) and, to a certain extent even if it was a grant (because, possibly, maintenance cost for supplies imported from one country are higher than for those from others and because of high transport costs). Naturally, this is not always the case, but it is a possibility which must be taken into account. In Nigeria, this applies especially to equipment for science laboratories and for workshops in some technical schools. The psychological effect of tied aid may be even worse. The donor is criticized for helping his own industry rather than the recipient country—a criticism which is understandable. On the other hand, the donor country must take into account its public opinion as well as balance of payments considerations, which may often be the decisive factors in its tied aid policy. A reasonable compromise solution is the one adopted by an important official agency: all goods and services to be provided under a particular grant or loan as well as firms undertaking the necessary construction work should be either from the donating country or, if equivalent goods or services can be supplied, from Nigeria.

Aid in the form of educational equipment raises a host of other problems which cannot be discussed in detail here. With regard to all such equipment—language laboratories, science laboratories, educational television, etc.—two basic questions must always be answered. Firstly, even if they are gifts, can the country afford, in the long run, to maintain them both technically and financially? Secondly, can the equipment be used by the teachers available and can it be integrated into the accepted curricula and teaching methods?

It may be asked whether external aid for capital projects should have top priority. There are at least two weighty arguments in favour of such a policy. Firstly, transfer of capital is much easier than transfer of men and of teaching methods. Secondly, aid for capital projects can be particularly indispensable because of the scarcity of local resources in developing countries. In this connexion, one should consider not only the general lack of capital, but also the high foreign-exchange component of educational projects. According to an official document published in Western Nigeria, this foreign-exchange component amounts to 30 per cent in primary education and in teacher training, 40 per cent in general secondary education, 45 per cent in technical and commercial education, 50 per

cent in universities and 40 per cent in modern aids for teaching. Projects to be financed by the IDA credit are estimated to have a foreign-exchange component of 37 per cent.¹

If this is so, it may appear economically very desirable to seek external aid to cover 30 to 50 per cent of capital expenditure in education projects. Yet, an analysis of the whole problem of educational finance and expenditure in Nigeria² shows that the most difficult problem which the country faces is the financing of recurrent expenditure. In one way or another Nigerians always succeeded in attracting external funds to finance the construction of school buildings. These funds may have been smaller than expected but, finally, the selected institutions, especially in the field of higher or even secondary education, have received funds indispensable for the setting up of buildings and for the basic equipment. Much more difficult, therefore, at present and in the long run, is the financing of recurrent expenditure.

Staffing and training of counterparts

The great importance of foreign aid in staffing new institutions has already been stressed. It should be said that external aid has, in general, responded to this challenge. In 1964, some 70 to 80 per cent of all external educational aid was devoted to recurrent expenditure, and more and more institutions are now assisted with expatriates, teachers or experts. In many cases, the supply of expatriates represents almost the totality of external assistance. This, for example, applies to the advanced teacher-training colleges sponsored by the United Nations Development Programme and Unesco, to the Northern Nigeria Teacher Education Project supported by the Ford Foundation, to the comprehensive high schools supported by US-AID, to the National Training Scheme for Instructors and Supervisors administered by the ILO, and to several other projects sponsored by private foundations.

The first point deserving particular attention is the problem of relations between teachers (or experts) sent to the new institution by the foreign aid agency and the rest of its staff—whether Nigerian or expatriate. In many of these institutions not two, but three or four, categories of employees exist: those provided by the aid agency, other expatriates hired under contract by Nigerian authorities, volunteers, and Nigerians. Salaries in each of the categories are different and so can be the work loads and working conditions in general (leave, housing, etc.). More difficult

1. IBRD, 'Appraisal of Educational Project Nigeria', to/434b, December 1964.

2. A. Callaway and A. Musone, *op. cit.*

still: although all belong temporarily to the same institution and are subordinated to the same principal, director or vice-chancellor, most of the employees can hardly not remain loyal to their original organizations. Managing and co-ordinating the work of such a staff becomes, therefore, one of the most difficult practical problems of the new institutions. Indeed, Nigerian experience shows that tensions which may arise between the various categories of staff and the degree to which they are solved can become the determining factor in the development of the new institutions.

The task for the individual teacher or expert is certainly not an easy one, especially for those in charge of directing the new establishments. It often happened in Nigeria that the first expatriate team sent to an institution did not immediately fulfil all the expectations and a new director or team had to be sent after only one or two years. The problem is even more complicated when two external aid agencies supply teams of teachers or experts to a single institution. But one very significant aspect of the whole question must be stressed: almost never does it come to a tension or a split between Nigerians on one side and expatriates on the other. Many of the difficulties arise between the different groups of expatriates or, in any case, cut across the division between Nigerians and non-Nigerians.

Experience has shown that all these difficulties can be overcome, and in several of the new establishments a smooth collaboration between the various categories of staff has been established. It would seem that three factors are of great importance in this connexion: first, the personality and professional capacity of all those involved, particularly of the head of the project; second, a very clear and precise division of labour and of the responsibilities of the staff; and, third, an early designation of a highly qualified Nigerian as head of the institution, a Nigerian whose authority all the staff is willing to acknowledge.

The staffing of the institutions is closely linked with the training of counterparts, i.e., of those who will eventually replace the expatriates. This is an integral part of most of the contracts under which expatriates are supplied and is in line with the principle that an assisted institution should eventually become self-supporting. The most frequent formula for training counterparts combines studies abroad with personal training given on the spot by expatriates.

Theoretically simple, the problem of training counterparts is, in reality, very difficult to solve. In extreme cases, the Nigerian counterpart is not designated at all, and the expatriate terminates his contract without ever having seen his successor. In Nigeria, this happens particularly in branches where the scarcity of local manpower is great, e.g., teachers of French; or in regions which lack qualified personnel in general. A significant example is that of the Advanced Teacher-Training College in Zaria. In the spring of 1965, three years after its creation and two years before the expiry of the foreign aid contract, only three out of the ten scheduled counterparts had been chosen and were receiving training; in other

words, most of the expatriates will leave without having accomplished anything like half their task—ensuring their replacement.

But it can also be argued that the whole concept of counterpart training needs revision in a context like the one of Northern Nigeria. No pressure on the government, it is said, can change the basic situation, which is a general lack of qualified candidates. In 1965, only slightly more than 100 Northerners graduated from both Nigerian and overseas universities. Most of those suitable to serve as counterparts have to be taken from existing institutions (schools or civil service) where they may be needed even more than in the institution to be created. Taking again as an example the Advanced Teacher-Training College in Zaria, it is understandable that some officials may, at the present stage of development, emphasize 'nigerianization'¹ from the bottom up. In practice they will therefore wish the ATTC to produce secondary-school teachers as soon as possible irrespective of who the tutors of the teachers are, leaving 'nigerianization' on this level to a later stage. In other words, the expatriate teacher is still needed as an operator of the new institution and not only as an adviser.

Whether one agrees or not that this should be so, the fact remains that counterpart training has sometimes been seen in too optimistic a light; in most cases it takes much longer than expected. In the Eastern Region, for example, all counterparts for the ATTC were designated and sent to study abroad, but most of them will return at a time when many of the expatriates they are to replace have already left or are preparing to leave. There will thus be no, or little, time for training on the spot and the transfer of experience. Yet everybody agrees on the necessity of counterparts working together with expatriates for a least a few months in order to ensure continuity.

Training counterparts is among the most important aims of foreign aid for the building up of institutions. Its effectiveness will depend on the determination both of the donating agency and of the Nigerian authorities. If, at the end of the project, trained counterparts are not available, the team supplied under foreign aid will have to be replaced by another expatriate team, this time paid from the Nigerian budget; or by insufficiently qualified Nigerians. In the first case, the running costs of the institution will become too high; in the second, the original aim of the project may be completely frustrated. This double danger can only be avoided by considering the counterpart training process as a long one, the length of which will vary from one region to another depending on local conditions, and which can hardly be defined in a general, rigid *a priori* formula.

1. This postulate in the North meant strictly 'northernization', i.e., to have as teachers and in other responsible jobs not just any Nigerians, but Northerners.

Building up of institutions and educational planning

From the point of view of the educational planner, the problem is to integrate foreign aid to the building up of institutions with the plan. Three questions must be asked in this connexion. Firstly, to what extent do the newly created institutions correspond to agreed priorities? Secondly, to what extent can their financing and running be assured from local resources during and after the aid period? And, thirdly, to what extent are the planning authorities able to direct external aid to the building up of institutions in accordance with planning requirements?

In theory at least, most of the foreign aid destined for the building up of institutions can be considered as conforming to priority requirements of Nigerian education. All the projects listed in the first part of this chapter fall in this category. It may be asked, of course, whether the relative emphasis on each of them has been the right one; whether, for instance, teacher training should not have received more aid than the universities, the universities less than secondary schools, etc. A clear answer to such questions could only have been provided by very comprehensive and up-to-date educational planning taking into account all the manpower requirements and the corresponding educational needs. Nigerian educational planning is certainly not so advanced, and it must be considered a success that external aid to the building up of institutions has, on the whole, concentrated on priority areas. But in one case, at least, it can safely be assumed that a better timing of priorities would have been fully justified: if external aid to science teaching in secondary schools had received greater emphasis well before 1964, many of the difficulties which have arisen in some of the post-secondary institutions could have been avoided. The federal ATTC in Lagos, originally intended to concentrate on the training of science and modern-language teachers, has not so far fulfilled its purpose owing to a lack of candidates with sufficient knowledge of science subjects. For the same reason, the proportion of students in science and engineering in universities is lower than it should be.

Another major complication arises from the very rapid changes in educational needs. The advanced teacher-training colleges provide a good illustration of what actually can happen. When they were created, around 1962, it was difficult to imagine that anything but this type of institution could substantially help to remedy the lack of qualified Nigerian secondary-school teachers. The total number of these teachers was 7,375, of which 2,101 were expatriates and 4,252 Nigerian non-graduates.¹ If 50 per cent in both categories were to be replaced, the secondary-school system could have absorbed immediately over 3,000 Nigerian teachers, a figure obviously too large if compared with the existing output of universities which was 270 per year. It is not surprising that, in view of these figures, both

1. Not including secondary-modern-school teachers.

the Nigerian authorities and the external aid agencies, in this case the United Nations Development Programme and Unesco, concluded that the creation of several new institutions destined to prepare as rapidly as possible relatively well, even if not top, qualified secondary-school teachers constituted a high priority. Yet, only three years later and before the new institutions had produced their first graduates, questions were being raised (in at least one if not two of the four regions) about their long-term employment possibilities in secondary schools.

Such rapid changes in educational needs are, of course, not compatible with the inevitable time-lag inherent in the building up of institutions. Here again, the only possible solution is comprehensive and up-to-date planning capable of foreseeing, at least partly, such changes. The great danger is that the orientation of foreign aid may often be subject to simplifying reactions. When a particular type of education has been neglected for some time, a sudden change may lead to overemphasizing its importance in the guise of such slogans as 'all for teacher training' or 'all for technical education'. Undoubtedly there is a great need for the donors to be flexible, i.e., to be able to adjust their contribution to the assisted institutions in the light of the change in requirements.

The second question of whether the country can afford the particular new institution is both simpler and more complicated to answer than the question of priorities. Simpler, because it only means assessing the cost to Nigeria of the project during and after the aid period and setting it against the available local resources;¹ more complicated, because the availability of local resources will depend to a large extent on what is believed to be the effectiveness of the project. If the latter is believed to be of vital importance of the country, then even a very high cost will prove acceptable. Such belief may, of course, imply value judgements and political considerations.

Almost all external aid projects usually require a more or less substantial financial participation by the Nigerian authorities. In the case of an advanced teacher-training college, for instance, Nigeria has to cover practically all the capital cost and more than 40 per cent of the recurrent expenditure, i.e., an average of £200,000 per year during five years. The IDA credit requires from Nigeria a contribution of £3.6 million, mainly for capital expenditure, quite apart from the additional annual recurrent expenditure of £2.6 million generated by the projects and which will have to be borne by the federal and regional governments.²

A relatively large participation of the recipient country in the project is

1. Even this may raise practical difficulties. Sometimes the costs of various services, such as electricity and water supply, transport of pupils or staff housing have not been calculated carefully enough.
2. Although this amount represents about 10 per cent of the present public (federal and regional) recurrent expenditures on education, it is assumed (see IBRD, *op. cit.*) that this sum 'is within the capacity of the federal and regional governments'.

considered by the donor as a guarantee of lasting interest. But it may also represent an obstacle if the recipient country finds it difficult, or impossible, to mobilize rapidly enough the required funds and personnel. This is why, in some of the contracts, the Nigerian authorities have reserved the option to seek additional external aid contributions to cover what should have been their own part; or to count as their part already existing facilities, such as land and buildings. Such arrangements may facilitate the realization of the project, but may create even greater difficulties in the second stage, when aid is withdrawn and all costs are to be covered from local resources. This may be the case of the comprehensive secondary schools, which will be very expensive to run, especially when compared with traditional schools. However, the high expense may be fully justified if the two comprehensive schools generate a desirable reform of the secondary-school system in accordance with the needs of the country. The planner faces here the difficult problem of evaluating the qualitative as well as the quantitative benefits of a course of action, and the only objective element at his disposal is the estimate of the cost of extending to the whole educational system the solution suggested by the pilot institution and of the feasibility of such an extension without damage to the other parts of the system. He must ask himself whether an alternative solution, such as technical training provided out of school, would not be considerably cheaper than the training provided in comprehensive schools. Sometimes even apparently simple external aid projects, for instance the introduction of handicraft training in primary schools, cannot be extended because extension would substantially raise the cost of the educational sector concerned.

The third question—to what extent the planning authorities can influence the direction of external aid—can be answered by stating that the authorities have always had the power to accept, modify or reject external aid for the building up of institutions. As will be seen later, they examine each project with a view to ascertaining its cost implications for the federal or regional budgets. In theory, therefore, the Nigerian planner has the possibility of directing external aid in accordance with priority requirements. In practice, however, external aid goes at least as much to what the donor considers the priority requirements as to what the Nigerian planners consider them to be. But the donor is much less qualified to judge whether the projected institution can sooner or later be integrated into the system or whether Nigerians can afford it.

In the past and during the first years of independence the need for educational institutions of all kinds justified a large amount of external aid for the creation of new institutions, even if the cost implications could not be foreseen adequately. But the situation has considerably changed in the last few years. Today, the Nigerian educational system, though certainly not perfect, has established centres in almost all branches and regions, from which expansion, reform and innovation can be propagated. It is far more important to strengthen these centres than to

create new ones, which may generate financial obligations beyond the capacity of the country. Using institutions already established enables the donor—and the Nigerian planner—to eliminate, at least partly, the risks involved in staffing new ones. It also means that external aid can be directed to institutions that have proved themselves. The five Nigerian universities have most of the departments which a developing country can reasonably claim to need. There are teacher-training colleges of all types and a sufficient choice of secondary schools as well as of research and training institutions in many fields of human resource development. Almost any innovation, including the introduction of new teaching media or the reform of curricula, can be undertaken from any of these established centres, instead of being created *ex nihilo*.

Fortunately, the present trends in external aid seem to reflect the above principle. The important IDA credit is not tied to the creation of one or a few brand-new institutions, but to 192 projects, 182 of them linked with existing schools. Similarly, the newest large United States project—the Northern Nigeria Teacher Education Project—does not imply the setting-up of vast buildings with a numerous staff, but the improvement of an already working concern: teacher training in the North. This trend in external aid—meaning a shift from institution creation to institution strengthening—reflects a certain maturity of the Nigerian educational system which expresses itself also in the shift away from the indiscriminate and massive, to the selective supply of expatriate teachers. It may be that the new approach is less stimulating to many individuals than the former, often indispensable, creation ‘in the middle of the jungle’. In the present circumstances, this approach is certainly closer to the requirements of effective external aid and of rational educational planning.

External aid for the building up of institutions can be the most promising form of assistance when it contributes to the introduction of innovations and to a qualitative improvement of the system. But it can also be the most wasteful when it engenders structures which the country can neither afford to maintain nor assimilate.

5 Transfer of foreign models

Almost all foreign aid to education is accompanied by a conscious or unconscious transfer of educational models. Any expatriate teacher, whether sent by a bilateral or a multilateral agency, brings with him the experience of the educational system in which he or she has grown up and worked; any textbook or item of educational equipment carries with it the context within which it was designed; and most of the projects are based on previous experience in some country or countries other than the recipient. This simple truth applies to Nigeria as much as it does to any other country.

The Nigerian educational system was modelled on the United Kingdom system, which still remains dominant in almost all fields. Structure, content and examination system are probably the three major areas where this dominance is at its greatest. In Nigeria, as in so many other African countries, the implantation of the United Kingdom model was due not only to the British, but also, and perhaps even mainly, to the insistence of Nigerians on having their schools and degrees similar to those of the United Kingdom. This insistence was due partly to reasons of prestige and partly to very practical considerations, clearly stated by Sir Eric Ashby:

'The first professors had to set up standards of teaching which would qualify the students to enter for London degrees in subjects already in the London syllabus. Clearly the pioneers had no choice but to adopt the pattern of an English university. Equally clearly this was the pattern which Africans themselves wanted. The African intellectual, educated in London or Cambridge or Manchester, would have been indignant at any softening of standards, any substitution of easier options, any cheapened version of higher education. So initially there was no problem of adaptation. The African wanted a replica of the British university at its best; the expatriate staff had no other model to offer.'¹

1. Eric Ashby, *African Universities and Western Tradition*, Oxford University Press, London, 1964.

The University of London thus became a sponsor of the University of Ibadan, a step which implied not only a certain amount of external aid, but also the full recognition, so much desired, of the Ibadan degrees. This, in turn, implied similar entrance examinations, curricula and final examinations.

This formula lost, of course, some of its justification with the progressive establishment of the country's major educational institutions; and, in recent years, there has indeed been a continuous shift from external models towards solutions more in keeping with the economic and social needs of the country, solutions adopted sometimes because of, and sometimes in spite of, external aid. The latter, though it has a built-in tendency to introduce foreign models, has on balance proved innovating rather than conservative. The University of Nsukka, the advanced teacher-training colleges, the comprehensive secondary schools, to quote some of the more recent projects having received external aid, represent a departure from the traditional model and not its strengthening. This, of course, does not necessarily mean that such departures are always in line with the country's needs.

A factor which has undoubtedly contributed to this progressive departure from the United Kingdom system is the multiplicity of models presented to Nigeria through the intervention of a multiplicity of donors. The country thus had the opportunity to realize that there are several educational systems and that value and prestige need not necessarily be attached to only one of them. On the other hand, the donors, too, were in a better position to see that their model is not the only one that can be adopted. And such mutual recognition may almost automatically lead to a search for new solutions more suited to local requirements.

But a multiplicity of donors and the consequent penetration of several external models has also potential disadvantages. Being exposed to several models may create confusion in the minds of pupils or students and raise the problem of equivalence of standards between institutions based on different models. The Nigerian experience shows that such dangers can be overcome and that the introduction of several external models can stimulate the development of specific national solutions. The case of the two largest universities, Ibadan and Nsukka, is very significant in this respect.

The University of Ibadan started in 1948 under the name 'University College' and was linked with the University of London but, under a federal law, was transformed into a fully autonomous university in December 1962. Although situated in the capital of the Western Region, it is a federal establishment. On the contrary, the University of Nigeria, at Nsukka, is, despite its name, a regional university (of the Eastern Region). It was formally created in 1955 and opened in October 1960, two years after an Anglo-American team under the joint auspices of the Inter-University Council of London and the International Co-operation Administration (now the US-AID) had established the principles according to which it should function. By 1964/65 both universities had approximately the

same enrolment—2,482 for Nsukka and 2,284 for Ibadan—which meant that Nsukka had developed much faster than Ibadan. However, in the eyes of the public, and sometimes even of specialized authors, the main difference between the two universities is that Ibadan was evolved on the United Kingdom model and Nsukka on the United States one. As Sir Eric Ashby noted, Nigeria was experimenting with two kinds of university constitutions, a novel one in Nsukka, and a conventional United Kingdom one in the other four universities:

'The "new look" in Nigerian universities is to be found at Nsukka in the Eastern Region. It had long been Dr. Azikiwe's belief that the American land grant college provided a better model than the British university for Nigerian higher education. He was impressed by its willingness to include vocational subjects, such as accountancy and journalism; its rejection of the idea that universities were to be confined to an intellectual élite; its commitment to extension work; its emphasis on farming and all that is involved in rural life. Accordingly Dr. Azikiwe founded an institution which he called the University of Nigeria inspired by the land-grant philosophy and fostered by Michigan State University.'¹

Historically it is true that the United States played virtually no role in the foundation of the University of Ibadan and a very important one in the creation of Nsukka. Whereas the first major grant for Ibadan came from the United Kingdom (£1.5 million through the Colonial Development Welfare Fund, for capital expenditure), the University of Nigeria received the largest assistance (£2.3 million from the beginning of 1960 to the end of 1964), from the United States Government. It is also true that many elements in the structure of Nsukka represent a departure from the traditional United Kingdom system: the sixth form is not a necessary requirement for entrance, a fourth year of courses has been introduced, heavy emphasis is laid on general and on extramural studies, a large number of vocational courses is provided, etc. All this means a shift from the élite concept to what may be called mass approach in university education.

Yet it would be wrong to assume that the preponderance of United States influence at Nsukka (reflected in 1965 by the presence of some thirty United States experts and professors, including the vice-chancellor) on the one hand, and the preponderance of United Kingdom influence at Ibadan University on the other, has led to any disorganization of Nigerian university life. In the first place, United Kingdom influence was not completely absent in the creation of the University of Nsukka, since the first plans were established by an Anglo-American team; and in 1964/65 there were twenty-eight British as against thirty American staff members. Secondly, the University of Ibadan, which has been receiving United States assistance for a long time, has progressively departed from

1. Eric Ashby, *op. cit.*

the traditional United Kingdom model more than is commonly thought. Here, too, the sixth form is not an indispensable entrance requirement, extramural studies are strongly emphasized, more and more specialized courses not taught in United Kingdom universities are part of the curriculum, and syllabuses are being continuously revised. What has happened in fact is that each of the two universities has been stimulated by, and has benefited from, the other. Nsukka, conscious of its position as a newcomer and fearful lest its methods should lead to a lowering of standards, has made great efforts to maintain high quality; and its very existence could not but strengthen the determination of Ibadan to adapt its teaching to Nigerian needs. At present, the two universities are complementary, in accordance with the statement which reflects the view of the Nigerian Commission on Post-school Certificates and Higher Education that 'it would not be in the national interest if one single pattern were to be imposed on all Nigerian higher education. The hope for Nigerian higher education lies in its diversity'.

Another example showing the advantages of a multiplicity of external models is that of the schools with multi-national staff, in particular, the Unesco-sponsored ATTCs, where the different educational backgrounds of the teaching staff have often facilitated the introduction of new teaching methods. Similarly, the contribution of non-United Kingdom volunteer teachers has on balance been a positive one despite, and sometimes because of, their different educational backgrounds. But the introduction of several external models can only be successful if the educational system into which they are introduced is sufficiently developed. Otherwise, it may lead to the creation of several parallel, or even unconnected, educational systems within one country. This is certainly not the case in Nigeria where the authorities have always had enough power to prevent any developments of this kind.

What has been said does not imply that Nigeria has solved all the problems resulting from the introduction of foreign models. But neither does it mean that all the shortcomings of Nigerian education can be attributed to their influence. In any case, the majority of external aid experts have by now become fully conscious of the dangers of imposing ready-made foreign solutions on Nigeria. The Netherlands, for example, who are to equip and staff the engineering department of the University of Nigeria, have been very careful to introduce, not the curriculum of the Delft or Eindhoven Universities, but a combination of several systems which would seem best suited to Nigerian needs.

It would also appear that the Nigerian insistence on traditional models is slowly giving way to a less rigid attitude. In 1963, for instance, sixteen of Nigeria's leading educators travelled to Sweden, France and the United States to study the educational systems of these countries with a view to evolving new concepts and techniques in Nigerian curricula. A similar study tour is scheduled in connexion with the reform of technical education.

This search for new methods does not mean a complete abandonment of the United Kingdom model; the latter will no doubt remain an important factor in Nigerian education for many years to come. But it can safely be said that recent trends in external aid, whether multilateral or bilateral, have contributed to a progressive change in traditional structures and methods and that the introduction of a multiplicity of external models has played an important and, on the whole, beneficent role in this evolution.

6 Procedures and machinery of external aid

The effectiveness of external aid depends to a considerable extent on what may appear to be a matter of form—the procedures and machinery for rendering and receiving assistance. In a country as large and politically complex as Nigeria such procedures are complicated, and highly important.

Nigeria is a country whose regions possess considerable responsibility in matters of education. External aid provided by official organizations, however, is by definition a matter which comes under the exclusive competence of the federal authorities dealing with external affairs. Only aid provided by private organizations escapes this rule. This simple fact determines the principles on the basis of which foreign assistance is given to, and received by, Nigeria.

Procedures

Official external assistance thus involves at least three participants: the donor on the one hand, and the federal and regional governments on the other. Formally, all foreign aid is granted on the basis of a request emanating from the Nigerian authorities. The procedure usually starts in the regional ministry of education and the request has to be approved by the regional ministry of economic planning (the premier's office in the Western Region) and by the regional ministry of finance. This approval implies that the request is in accordance with the region's development plan and that the necessary local resources to cover its costs to Nigeria are available. The request is then sent for review and approval to the federal ministry of finance and, if a technical assistance agreement is involved, to the federal ministry of economic development. Both these ministries transmit the request to the donor agency, which, after approval of the project, draws up an official agreement to be signed, on the Nigerian side, by the competent regional ministry or ministries and by the federal ministry concerned. Thus four or five Nigerian ministries are involved in any external aid operation.

The donor is, of course, informed of the request well before he receives it officially. Usually, the regional ministry of education contacts him informally at the beginning of the procedure to ascertain whether he would be willing to support the project in question and what additional information and justification he would require. In the meantime, the donor will usually check with the federal authorities to make sure that the request is likely to get their backing.

It is clear from the foregoing that external aid which is not integrated with educational and general development planning is theoretically impossible since any request must be approved by at least two planning bodies. But it is also clear that such a procedure is time-consuming. This last point raises a problem which preoccupies many Nigerians—the time-lag in external aid operations. Nigerian experience shows that it takes at least one year, and sometimes up to three years, for an initial request within the regional ministry of education to materialize in the form of an actual disbursement of funds. The harmful effects of such a time-lag are well known: the rise in price levels will make the originally foreseen amount of aid insufficient for the implementation of the project; a shift in priorities may take place in the meantime and the delay may endanger the realization of other targets of the educational plan to which the foreign aid project was linked.

It is difficult to see, however, how the conditions which are at the origin of this time-lag could be substantially changed. Official agencies, whether bilateral or multilateral, are subject to administrative or legislative limitations and Nigerians can disregard neither the federal structure of their country nor the imperative of linking external aid to over-all planning targets. Any shortening of the time-lag could therefore come only from a more efficient administration, a more rapid transmission and examination of requests by all concerned. At present, all a planner can do is to take the time-lag into due consideration so as to avoid any false hope concerning the timing of the project.

In Nigeria, the time-lag is considerably shortened when aid is provided by some of the private organizations, first, because their administrative machinery is less complicated and more flexible than that of official organizations, and, second, because the operations of private donors do not need the approval of the federal authorities. Private organizations can deal directly with regional ministries or with universities; as a consequence, a project agreement is often made final within three months. The danger that aid from such donors may not be in accordance with recognized priorities has in general been avoided because private donors have paid great attention to this problem and because they have taken care to inform the federal or regional planning bodies of their intentions.

An important and perhaps extreme example which will illustrate in more detail some of the practical problems involved in the preparation of external aid operations is the large International Development Association (IDA) credit to Nigerian education. This credit of \$20 million (£7.1 million) provides for the

expansion and improvement of secondary education, of teacher training and of technical and vocational education. One hundred and ninety-two projects all over Nigeria of a total value of \$30 million are to be implemented thereby. The first step, involving the creation of ten new schools and the extension of 182 existing institutions, towards the credit agreement was taken at the end of 1962 when the Nigerian government asked Unesco to send an educational investment programming mission which would have, among others, the following terms of reference:

'The purpose of the mission will be to advise the government on the investment requirements of its educational development programme and, more particularly, on projects within the programme for which development capital might be sought from external sources, both bilateral and multilateral.'

The report, prepared by the Unesco team in 1963,¹ although originally not intended exclusively as the basis for an IDA credit, became an important point of reference for further negotiations. It contained an enumeration of projects for which external aid should be sought and which subsequently have been considered by a World Bank Economic Mission to Nigeria. A provisional list of educational projects of high priority likely to qualify for IDA assistance was drawn up and forwarded to the federal and regional governments for their views.

A second World Bank mission helped with the formulation of the Nigerian request based on the previous list. Finally, an 'educational appraisal mission' of the World Bank visited the country at the end of 1963 to consider the integration of the selected projects with the educational system as a whole and to prepare the final negotiations of the contract which was signed in early 1965. All during the process the Nigerians have had a determining influence on the choice of projects to benefit from the credit. IDA has only indicated the broad fields for which funds could be made available as well as educational sectors to be excluded, namely primary education and universities. Nigerians then had to do a great amount of preparatory planning and statistical work on each of the 192 selected projects. Inspectors had to be assigned to fill out a special form for each school and the ministries of work had to participate fully in the preparation. Under these conditions, it is not surprising that the whole procedure took almost two and a half years.

The procedures naturally vary from one donor to the other and from project to project. But usually the donors require a strict guarantee that the assistance they provide will be used according to pre-established plans and with a minimum of waste. However, the preparation of such plans is not an easy matter for a country lacking qualified personnel for this type of work. The donor may thus be tempted, either to wait until the Nigerian authorities themselves present the

1. 'Report of the Unesco Educational Investment Programming Mission to Nigeria'.

plans, or to draw them up himself. In the first case, the procedure may be an extremely long one, with all its harmful consequences; in the second case, the authorities may be faced with a *fait accompli*, and, even if the aid project does not fulfil a priority requirement, they may be chary of refusing it lest the donor should feel offended. There is certainly a third way: the responsibility for preparing the plans rests with the recipient, but the donor provides him with the necessary assistance in this work, without requiring in the preliminary stages of negotiations too many details of the project. This is probably the only practicable solution so long as the recipient country has no properly qualified nationals to do the job.

Co-ordinating external aid

More than fifty foreign organizations provide educational assistance to Nigeria.¹ There can be little doubt that the over-all effectiveness of this flow will depend largely on how their activities can best be co-ordinated and oriented.

On the whole, the programmes of the various donors have been complementary rather than competitive, mainly because Nigerian needs are so great that the danger of overlapping could easily be avoided, but also because a certain 'division of labour' came into being more or less spontaneously after independence, and has prevailed ever since. Unesco and the United Nations Development Programme concentrate on advanced teacher training and on certain special or strategic sectors, such as libraries and educational planning. United Kingdom aid, besides the teacher schemes mentioned earlier and the teaching of English, takes essentially the form of capital expenditure on technical and higher education. United States aid started with a strong emphasis on universities, but is now increasingly directed to secondary general and technical education as well as to teacher training for primary education. Most of the smaller donors concentrate on scholarships, with the important exceptions of Canada, with a relatively large contribution in teachers for secondary schools, and of the Netherlands, which provides assistance to the engineering department of the University of Nsukka.

Although there is no institutional framework for consultation between the donors, in fact a great deal of mutual information exists on the basis of personal contacts among the representatives of the various agencies. This has often proved sufficient to avoid overlapping or even to secure complementarity. In some cases, however, a more institutionalized form of co-ordination would have ensured a better 'division of labour', particularly in the case where several donors support a single project. Experience has shown that, in such cases, there must be a very clear and precise definition of the responsibilities of each donor. The problem is

1. However, no more than ten account for at least 95 per cent of the amount of aid provided.

relatively simple when each of them provides a different form of assistance, e.g. teachers, equipment, and capital for buildings, respectively; it is much more delicate when the same form of assistance, in particular teachers and advisers, is provided by two or several agencies.

Bureau for External Aid for Education

Clearly better co-ordination can be ensured only through a Nigerian institute acting on the basis of educational needs as defined by the country's plan and priorities. It is for this purpose that Nigeria established in 1961, with the help of a grant of £80,000 from the Carnegie Corporation, the Co-ordinating Committee for External Aid for Education with a secretarial and executive body called the Bureau for External Aid for Education. Indirectly the creation of the committee and of the bureau was in response to a general recommendation of the Addis Ababa Conference, 1961:

'Emphasis was laid on the necessity for better co-ordination of offers of assistance and of integration of this assistance into national development plans. There was general agreement that major responsibility for this lay with the receiving African country, which implied the establishment of adequate governmental machinery through which co-ordination and integration could be effected. It would be of the greatest assistance to education ministries in all African countries if some type of clearing-house could be set up by all the various contributing bodies in order to sift and direct requests to the most suitable points.'

The same recommendation has also been formulated during the preparation of the Ashby report.

The aims of the new institution, as outlined by the co-ordinating committee at its inaugural meeting, are:

1. To co-ordinate, through consultation and through the services of its bureau, applications for external aid for education in Nigeria.
2. To formulate and prosecute applications for external aid for selected projects in educational development plans.
3. To consult representatives of aid-giving countries, organizations or bodies for advice in regard to external aid.
4. To review the progress of schemes of technical assistance for education in Nigeria.
5. To explore possible sources of aid for educational development.
6. To serve the federation as a whole as a clearing-house in all schemes pertaining to the acquisition of external assistance in regard to men, money and educational materials from abroad; to co-ordinate certain projects, e.g., training teachers

abroad, recruiting of teachers from abroad, operation of vacation courses for teachers with assistance from abroad; provided that, in the performance of these duties, the committee does not prejudice any direct application by any government in the federation bearing in mind the constitutional provisions.

The machinery set up to implement these very ambitious objectives is a relatively simple one. The co-ordinating committee is composed of the federal minister of education as well as the ministers of education for all the regions with their permanent secretaries, plus representatives of the federal ministries of finance, foreign affairs and Commonwealth relations, and economic development, as well as the secretary of the National Universities Commission. The senior staff of the bureau consists of a secretary (who must be a Nigerian) and of three under-secretaries. The first secretary was the chief federal adviser on education and the first acting secretary an expatriate. Since the end of 1964, the three under-secretaries alternate in the function of the acting secretary. The budget is relatively modest, amounting to about £25,000 a year, of which about half is covered by the Carnegie Corporation during the five years starting in 1961.

There is little doubt that the bureau has made considerable progress towards attaining the objectives assigned to it. It is gathering regular yearly information on the flow of external aid, a task fraught with many difficulties, as pointed out at the beginning of this study. It has rendered great services as a distributing centre of scholarships offered by foreign donors as well as of expatriate teachers supplied through various aid schemes. It has also played an important role in the preparation of some of the larger foreign aid projects; in particular, it has given considerable help in supplying the information necessary for the IDA credit.

But neither the committee nor the bureau could fulfil all the aims originally assigned to them; for instance they could only initiate foreign aid projects to a limited extent, and they have not yet become an instrument enabling the educational planner to direct the flow of external aid. The main reason for these limitations is to be found in the fact that the committee and the bureau have no constitutional status; they were created by a government decree, not by an act of parliament. The bureau is, administratively, part of the federal ministry of education, but is, in fact, an inter-regional, not a federal, body. As such, it can only assert its powers to the extent that the various aid agencies and Nigerian recipients are prepared to concede them.

Thus, the problems of the bureau reflect in many ways the intricate problem of the relations between federal and regional authorities in educational matters. It should also be said that almost all donors have fully co-operated with the bureau; they have channelled their offers of aid through it, especially with regard to scholarships and teachers, or at least have informed it of their projects. But as long as questions pertaining to foreign aid to education are discussed in the first place in the regions, the bureau can hardly do more than register decisions taken

elsewhere and the donors will necessarily tend to concentrate their attention on the real centres of action rather than on the bureau. This attitude, understandable as it may be, does not of course strengthen the planning process nor the unity of the country in general.

Despite these handicaps, the Bureau for External Aid represents an experience which should be studied carefully. It constitutes one of the few attempts to co-ordinate all external aid to education in a developing country.

Two other bodies concerned with foreign aid have already been mentioned—the scholarship boards and the National Register of Students. Another important organization is the National Universities Commission, whose creation was recommended by the Ashby report with a view to playing 'a vital part in securing funds for universities and in distributing them; in co-ordinating (with out interfering with) their activities, and in providing cohesion for the whole system of higher education in the country'.

When established in 1962, the commission was asked explicitly to act as an agency for channelling all external aid to the universities, and, as far as official foreign aid is concerned, this is actually the case. Private agencies usually deal directly with the universities, but inform the commission.

The legal position of the commission is not much stronger than that of the Bureau for External Aid. Although the Ashby report recommended that it be created by an act of parliament, and subsequently the commission asked to be converted into a statutory body, it remains an administrative organ within the office of the federal prime minister. But its powers are clearly stronger than those of the bureau, largely because both external grants and federal subventions are in fact channelled through it and, partly at least, on its recommendations. The commission, therefore, is a real centre of power to which Nigerian universities, despite their jealously guarded autonomy, will have to pay more and more attention.

7 External aid to educational planning

The importance of effective educational planning for improved utilization of external aid follows from all the previous discussion. External aid to educational planning appears therefore, from almost every point of view, as a top priority both for the donor and for the recipient. It can take the form of either indirect or direct aid.

Major forms of indirect assistance have been described in the preceding chapters. Essentially such assistance implies that the donor acts as far as possible through and/or in co-operation with existing planning bodies: with the Bureau for External Aid for Education, with the Scholarship Board, with the National Universities Commission and others. More generally it implies acting in accordance with targets and objectives which can be discerned from the available educational plans. In this way, plans and planning bodies are strengthened by gaining the prestige and recognition which they often need more than anything else. In general Nigeria has had this type of support.

Direct assistance to educational planning can be of many kinds: financial support of educational planning bodies, training of their staff, supply of planning experts, financial or expert aid in collecting the statistics indispensable for drawing up a plan and so on. In all these respects, Nigeria has benefited from external aid. The first major planning effort—the Ashby report—was financed by a private United States foundation; and so was the establishment of the Bureau for External Aid and of the National Universities Commission. The educational statistics of the Federal Government owe much of their precision to the help of the expert supplied by Unesco. Unesco also sent a planning mission in 1963 which, among other things, prepared the ground for the IDA credit; and, more recently, it financed a long-term mission of three planners in the Eastern Region. The planning of primary education in the Northern Region is being developed thanks to the support of Unicef. The development of agricultural and rural education is being helped by ILO and FAO experts within the planning units of the regional govern-

ments. An important report on the expansion of technical education in the Eastern Region has been prepared by an expert sent by Israel. The formulation of the basic principles of development in specific sectors of education has been greatly helped by conferences and seminars sponsored by the United States and United Kingdom governments. The above list is far from being complete, but it should give an idea of the extent and variety of direct aid to educational planning.

When one considers the number and variety of foreign experts helping educational planning in one way or another, Nigerian experience confirms the fact that preliminary training can only on rare occasions fully equip an expert with the qualities needed to make a successful member of a mission. Knowledge of the country, of its cultural and social milieu, of the approach required in personal as well as professional dealings can only be acquired after the expert has spent a certain time in the field. This tends to diminish the effectiveness of short-term advisory missions, lasting for just a few weeks or months.

Another conclusion which can be drawn from the Nigerian experience is that only those foreign experts or missions which have been integrated within the administrative machinery of the federal or regional authorities have had any impact on the planning process. Planning units composed exclusively of foreign specialists working apparently on their own, even if well qualified, have had no real impact on planning or the educational administration, however brilliant and pertinent their recommendations. On the other hand, if the Ashby Commission and other planning ventures undertaken with the help of external aid agencies have had a great influence, it was because foreign experts joined with Nigerians in a common undertaking. Such a process may be time-consuming and bureaucratic, but it is the only one which leads to concrete results.

Lastly, it should be stressed that external aid in the preparation of an educational plan and in the establishment of a planning machinery represents only the first important step. What is much more difficult is the next stage, i.e., the translation of the plan into a course of action. The problem can perhaps best be illustrated by the case of the IDA credit. Whereas the preparation of the 192 projects required only a few expatriate advisers, scores of experts will be needed to direct and supervise the execution of these projects: to prepare the tenders, to ensure that deadlines are respected, materials delivered according to the original terms, building contracts fulfilled or, if need be, promptly and adequately revised, etc. This is a long-term task requiring large numbers of executives, and this necessarily limits the direct role of the foreign aid expert. Therefore his indirect role, that of training Nigerians for such operational tasks, will become correspondingly more important. The basic problems to consider in this connexion are the number of operators and administrators needed at each level, the form of training necessary, and how and where this training should be given. So far, very little has been done to solve these very important problems.

As the late Prime Minister of India, Jawaharlal Nehru, put it:

'We in the Planning Commission and others concerned have grown more experienced and more expert in planning. But the real question is not planning, but implementing the Plan... I fear we are not quite so expert at implementation as at planning.'¹

It may well be that in the near future, if not already at present, the availability of qualified executives—of those in charge of the implementation of the plans and projects—will represent the most important prerequisite for effective foreign assistance to Nigerian education.

So far—and this should be repeated in conclusion—external aid to education in general and to educational planning in particular has created many problems both for the Nigerians and for the donors. But, in view of the novelty and complexity of these problems, it is rather surprising—and gratifying—that it should have achieved so much in so short a time.

1. A. Waterston, 'What do we know about planning?', *International Development Review*, Washington, D.C., December 1965, p. 2.

IIEP book list

The following books, published by Unesco/IIEP, are obtainable from the Institute or from Unesco and its national distributors throughout the world:

Educational development in Africa (1968). Three volumes, containing eleven African research monographs)

Educational planning: a bibliography (1964)

Educational planning: a directory of training and research institutions (1968)

Educational planning: an inventory of major research needs (1965)

Educational planning in the USSR (1968)

Fundamentals of educational planning (series of booklets; full current list available on request)

Manpower aspects of educational planning (1968)

Methodologies of educational planning for developing countries by J. D. Chesswas (1969)

Monographies africaines (five titles, in French only; list available on request)

New educational media in action: case studies for planners (1967. Three volumes)

The new media: memo to educational planners by W. Schramm, P. H. Coombs, F. Kahnert, J. Lyle (1967. A report including analytical conclusions based on the above three volumes of case studies)

Problems and strategies of educational planning: lessons from Latin America (1965)

Qualitative aspects of educational planning (1969)

The following books, produced in but not published by the Institute, are obtainable through normal bookselling channels:

Quantitative methodologies of educational planning by Héctor Correa. Published by International Textbook Co., Scranton, Pa., 1969

The world educational crisis: a systems analysis by Philip H. Coombs. Published by Oxford University Press, New York, London and Toronto, 1968

The International Institute for Educational Planning

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